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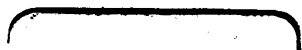
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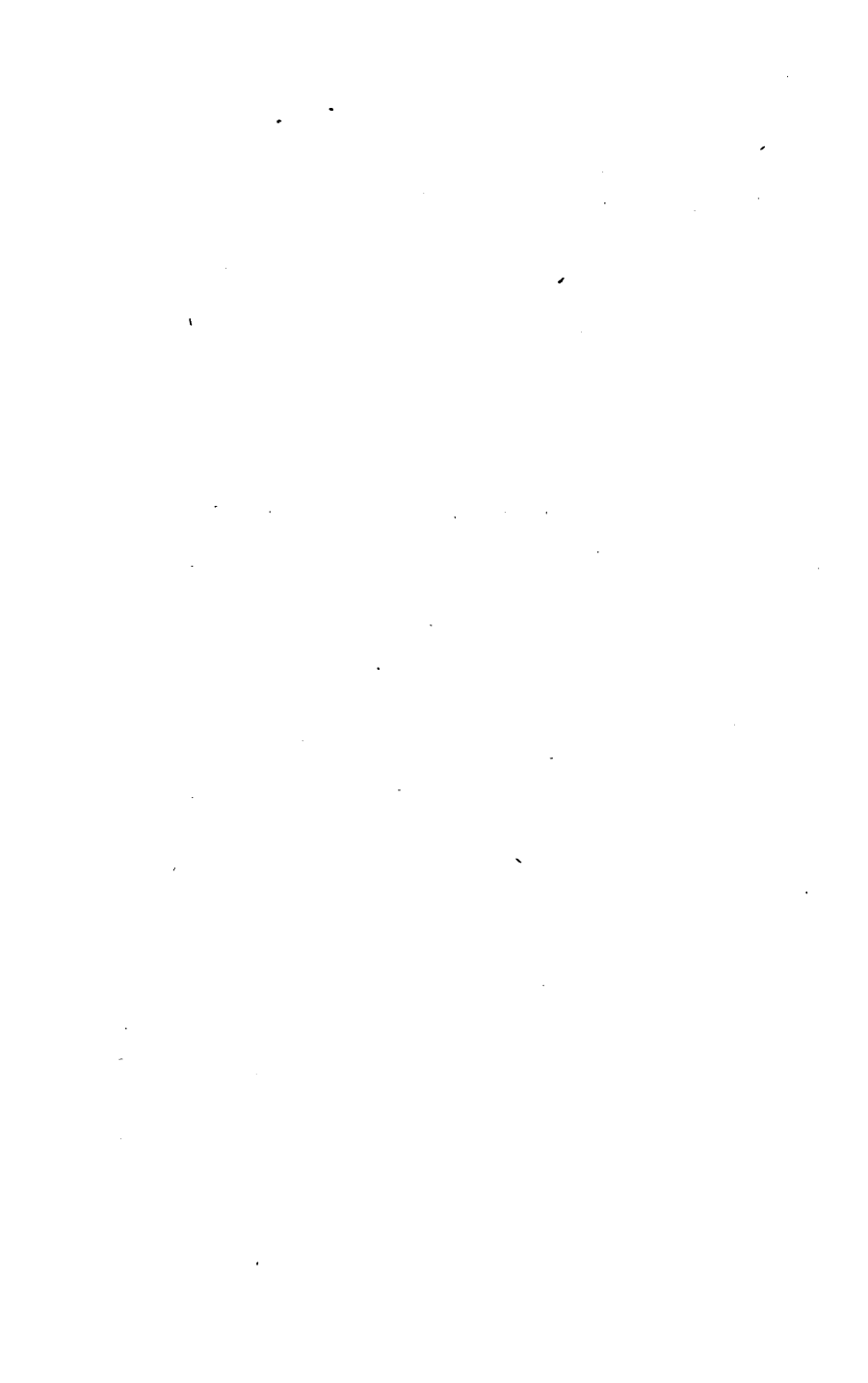


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KEY

TO THE

FRANKLIN

WRITTEN ARITHMETIC

BY

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BOSTON
WILLIAM WARE AND COMPANY
[SUCCESSORS TO BREWER AND TILESTON]

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✓

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PREFACE.

THE principal part of this Key is made up of answers to the Examples for the Slate, including answers to the Exercises upon the Drill Tables, in the Franklin Arithmetic. In a few instances, as in Partial Payments, in the Average of Payments and of Accounts, the partial results are given, or the processes indicated.

The Key is designed especially to save labor for the teacher; it is to give him the means of testing the results of the pupils' work, without having to do all the work himself.

The pupil should not have the answer to his problem under his eye at the outset, lest he perform his work with reference to that; he ought rather to form the habit of working solely from the conditions given in the statement of the problem. It would be better, even then, that he should be able to test his own work by some method of proof, or by reviewing his processes. But next to this, and perhaps all that can be expected in the majority of cases, would be to let him compare his result with that given in the Key.

Great pains have been taken to have the answers correct. Yet should the book be found to be wholly free from errors, it would be a gratifying surprise to the authors. And they would earnestly request that any errors which may be discovered be reported to the publishers, and the requisite corrections will be promptly made.

BOSTON, August, 1878.

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PERCENTAGE	78
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KEY.

Page 5.

Ex.	Ans.
9.	4,000.
10.	4,400.
11.	4,040.
12.	4,004.

Page 6.

13.	8,422.
14.	356,890.
15.	60,065.
16.	1878.

Page 7.

17.	46thous. 520 units.
18.	406 tho. 502 units.
19.	1 million, 1 thous. 110 units.
20.	85,503,007.
21.	906,218,028.
22.	3,037,900,200.
23.	18,000,000,004.
24.	40,700,000.
25.	37,099,009,000,000.

Page 11.

53.	0.7.
54.	0.07.
55.	0.007.
56.	0.25.

Ex. Ans.

57.	0.039.
58.	7.005.
59.	25.0049.
60.	0.00306.
61.	0.05047.

Page 15.

1.	12,880.
2.	757.
3.	11,347.
4.	78,239.
5.	664.
6.	1,135.
7.	135.237.
8.	4.019.
9.	20.429.

Page 18.

10.	2,316 bushels.
11.	6,776 pounds.
12.	\$ 2,785.
13.	3,925 yards.
14.	3,023 pounds.
15.	{ 1,191 barrels. \$ 8,259.
16.	1,604 miles.
17.	{ 7,329 acres. 621,472 trees.

Page 19.

Ex.	Ans.
18.	1,038 miles.
19.	\$ 77,277.
20.	12.297.
21.	\$ 1814.155.
22.	5.17 miles.
23.	\$ 33.70.
24.	39.023 acres.
25.	35.625 miles.
26.	\$ 160.13.
27.	\$ 1,123.66.
28.	\$ 1,034.33.
29.	\$ 886.84.
30.	\$ 289.87.
31.	\$ 1,932.19.

Page 22.

1.	141 oranges.
2.	321 acres.

Page 23.

3.	571.
4.	102.
5.	8,272.
6.	654.
7.	\$ 357.
8.	78 years.
9.	972 years.

Page 24.		Ex.	Ans.	Ex.	Ans.
Ex.	Ans.	42.	883.83.	25.	40,907,020.
10.	2,771 oxen.	43.	\$ 89.	26.	150,000.
11.	473 birds.	44.	715 persons.	27.	112,000.
12.	178.5.	45.	\$ 2,058.	28.	168,300.
13.	\$ 11.72.	46.	\$ 20,060.		1,683,000.
14.	999.999.	47.	162 miles.		16,830,000.
Page 26.		48.	338 miles.	29.	21,440,000.
15.	750 bushels.	49.	712.	30.	25,628.
16.	\$ 297.	50.	\$ 1,340.	31.	66,912.
17.	2,776 acres.	Page 30.		32.	18,763.
18.	3,948 feet.	1.	980 pounds.	33.	32,215.
19.	\$ 1,881.87.	2.	1,032 pounds.	34.	2,573,284.
20.	84 years.	3.	\$ 2,191.	35.	2,740,356.
21.	\$ 6,175.	4.	\$ 4,275.	Page 33.	
22.	215,174 bushels.	5.	2,560 miles.	36.	850.
23.	1,522 miles.	6.	407 days.	37.	4,802.
24.	35,884.	7.	63,360 feet.	38.	79,576.
25.	27,333.	Page 31.		39.	368,400.
26.	78,883.	8.	5,124 ¢.	40.	4,378,125.
27.	110,121.	9.	\$ 2,916.	41.	488,151.
28.	202,837.	10.	\$ 2,856.	42.	46,215.
29.	298,122.	11.	5,156 ¢.	43.	1,030,945.
30.	128,623.	12.	\$ 2,352.	44.	3,834,432.
31.	881,803.	13.	3,913 cents.	45.	233,473,500,000.
32.	3 times ; 440,111 over.	14.	2,403.	46.	381,840,480,000.
33.	139,886 feet.	15.	11,304.	Page 34.	
Page 27.		16.	57,817.	47.	43.24 ; 9,082.5.
34.	194.85 acres.	17.	1,890,441.	48.	42.5454 ; 0.009.
35.	0.315.	18.	1,325,700.	49.	24.
36.	0.515.	19.	1,692,501.	Page 36.	
37.	76.87.	20.	650 cents.	50.	\$ 540 ; \$ 2,700.
38.	7,551.5544.	21.	\$ 10,000.	51.	\$ 5,100.
39.	906.975.	22.	\$ 8,250.	52.	41,400 stitches ;
40.	584.995.	Page 32.			496,800 stitches ;
41.	11.086.	23.	5,930,720.		2,980,800 stitches ;
		24.	7,599,240.		155,001,600 "

Page 50.		Ex.	Ans.	Page 55.	
Ex.	Ans.			Ex.	Ans.
1. 5,095,768.		35.	\$ 71.04.	1.	\$ 118.98.
2. 4,643.		36.	\$ 331.00.	2.	\$ 62.91.
3. 53,291.		37.	\$ 52.00.	Page 60.	
4. 15,672 by 698.		38.	Gained \$ 39.	3.	\$ 19.16; \$ 42.50.
5. 13,702.		39.	90 days.	4.	\$ 16.60.
6. 931,055.		Page 54.		5.	\$ 61.31.
7. 76,350.		40.	14 posts; 65 rails.	6.	\$ 36.88.
8. 405,095,040.		41.	\$ 12,200.	7.	\$ 21.75.
9. 17,240,192.		42.	\$ 2,028.	8.	\$ 952.56.
10. 4.		43.	28 days.	9.	24.
11. 876,232.		44.	15 months.	10.	288.
12. 190.		45.	\$ 8.00.	11.	60 boxes; 20¢ rem.
13. 2,488,496.		46.	134 $\frac{1}{2}$ acres.	12.	32 veils; 56¢ rem.
14. 5,800.		47.	\$ 118.00.	13.	{ 35 dinners; \$ 0.12 $\frac{1}{2}$ rem.
Page 52.		48.	4,997.	Page 69.	
15. \$ 1,678.00.		49.	225 miles.	14.	\$ 1,085.18.
16. 480 acres.		50.	Gained \$ 161.	15.	\$ 92.75.
17. \$ 1,592.00.		51.	2,271; 2,053.	16.	\$ 167.50.
18. 5,718 gallons.		Page 55.		Page 70.	
19. 23,831 men.		52.	\$ 52,458.	17.	\$ 74.69.
20. \$ 390.00.		53.	2,323,200,000 cu. ft.	18.	\$ 5.16.
21. \$ 35.25.		54.	883; \$ 56.15 left.	Page 71.	
22. 588 miles.		55.	23 $\frac{3}{4}$ hours.	19.	\$ 306.28.
23. 4,474 sq. m.		56.	\$ 85.20.	20.	\$ 248.30.
24. 5 States; 1,270 sq. m.		57.	50 days.	21.	\$ 65.88.
25. 5,538 sq. m.		58.	40 pieces.	22.	\$ 1,035.84.
26. 3; 4; 5,270 sq. m.		59.	3,711 years.	23.	\$ 2.42.
27. 30,000 lbs.		60.	170 B. C.	24.	\$ 9.13.
Page 53.		61.	1438 A. D.	25.	—
28. 660 pupils.		Page 56.		26.	\$ 14.50.
29. 2,122 feet.		62.	10 $\frac{3}{4}$ years.	Page 73.	
30. 182 girls.		63.	499 $\frac{171}{185172}$ seconds.	For answers to drill ex-	
31. \$ 1,960.00.		Pages 59, 61, and 63.		ercises on Table No. 4,	
32. \$ 136.00.		Answers to the drill ex-		see page 53 of this Key.	
33. \$ 1,436.40.		ercises on tables 1, 2,			
34. 3,276 bush.		and 3 will be found on			
		page 33 of this Key.			

Page 74.

Ex.	Ans.
27. \$6.09.	
28. Lost 50¢.	
29. \$4.80.	
30. \$36,649.62.	
31. \$292,318.04.	
32. \$9.92.	
33. \$1.25.	
34. 16 boys.	
35. \$137.05.	
36. Whole, \$9.66; apple, 25¢; peach, 28¢; pear, 55¢.	
37. \$570.	

Page 78.

1. 2, 2, 3, 3, 5.
2. 2, 2, 2, 2, 2, 2, 3.
3. 2, 2, 2, 2, 11.
4. 2, 2, 2, 2, 13.
5. 2, 2, 5, 13.
6. 13, 13.
7. 7, 47.
8. 2, 13, 13.
9. 3, 7, 17.
10. 2, 2, 7, 23.
11. 2, 2, 3, 3, 19.
12. 2, 2, 5, 5, 5, 5.
13. 11, 31.
14. 2, 2, 2, 43.
15. 2, 181.
16. Prime.
17. 2, 2, 2, 3, 17.
18. 2, 3, 3, 5, 5.
19. 2, 5, 59.
20. 2, 2, 2, 2, 5, 7.
21. 2, 2, 149.
22. 13, 53.

Ex.	Ans.
23. 2, 2, 2, 2, 2, 11.	
24. 3, 3, 79.	
25. 2, 3, 127.	
26. 2, 2, 2, 101.	
27. 2, 2, 11, 19.	
28. 3, 3, 3, 5, 7.	
29. 2, 2, 3, 3, 3, 3.	
30. 2, 2, 2, 2, 2, 2, 3, 7.	
31. 2, 2, 3, 97.	
32. 2, 2, 2, 2, 7, 29.	

Page 80.

a. 70.	g. 15.
b. 46.	h. 18.
c. 10.	i. 2.
d. 2.	j. 11.
e. 11.	k. 8.
f. 5.	l. 75.

Page 81.

33. $4\frac{1}{11}$.
34. 3.
35. $6\frac{2}{3}$.
36. \$2.50.
37. 338 bushels.
38. 175 feet.
39. 306 dozen.
40. \$12.
41. 70 men's work.
42. 10 weeks.
43. 24 days.
44. $38\frac{2}{3}$ yards.
45. 4 months.
46. 1,260 overcoats.

Page 83.

47. 4.	50. 6.
48. 6.	51. 14.
49. 9.	52. 13.

Ex.	Ans.	Ex.	Ans.
53. 1.		56. 6 feet.	
54. 6.		57. 3 feet.	
55. 3 feet.		58. 21 feet.	

Page 84.

59. 17.	61. 1.
60. 21.	62. 17.

Page 86.

63. 2,520.
64. 180.
65. 360.
66. 840.
67. 7,644.
68. 3,744.
69. 5,040.
70. 2,520.

Page 87.

71. 75,712.
72. 35,880.
73. 616.
74. 19,824.
75. 940,500.
76. 554,664.
77. 9,680.
78. 1,007,930.

Page 91.

1. $\frac{1}{4}$.	7. $\frac{1}{8}$.
2. $\frac{2}{3}$.	8. $\frac{381}{1264}$.
3. $\frac{1}{7}$.	9. $\frac{487}{882}$.
4. $\frac{5}{8}$.	10. $\frac{103}{387}$.
5. $\frac{19}{21}$.	11. $\frac{65}{248}$.
6. $\frac{8}{11}$.	12. $\frac{187}{338}$.

Page 92.

13. $6\frac{1}{4}$.
14. $8\frac{1}{18}$.
15. $10\frac{1}{18}$.

Ex. Ans.

16. $47\frac{1}{2}$.
 17. $280\frac{1}{4}$.
 18. $22\frac{3}{4}$.
 19. $49\frac{3}{4}$ days.
 20. $18\frac{1}{8}$ years.

Page 93.

21. $4\frac{1}{8}$.
 22. $108\frac{2}{3}$.
 23. $528\frac{1}{2}$.
 24. $57\frac{1}{2}$.
 25. $72\frac{1}{2}$.
 26. 200 .
 27. $48\frac{1}{2}$.
 28. $567\frac{1}{10}$.
 29. $899\frac{1}{2}$.

Page 96.

30. $2\frac{1}{2}$.
 31. $2\frac{7}{8}$.
 32. $1\frac{9}{10}$.
 33. $1\frac{1}{2}$.
 34. $1\frac{3}{4}$.
 35. 1.
 36. $1\frac{1}{2}$.
 37. $1\frac{1}{2}$.
 38. $1\frac{1}{2}$.
 39. $1\frac{601}{1000}$.
 40. $9\frac{1}{2}$.
 41. $168\frac{7}{10}$.
 42. $172\frac{9}{10}$.
 43. $737\frac{1}{2}$.

Page 98.

44. $\frac{9}{28}$.
 45. $\frac{1}{2}$.
 46. $\frac{1}{270}$.
 47. $35\frac{1}{2}$.
 48. $16\frac{1}{2}$.

Ex. Ans.

49. $59\frac{3}{4}$.
 50. $11\frac{3}{4}$.
 51. $4\frac{3}{4}$.
 52. $24\frac{5}{8}$.
 53. $5\frac{1}{4}$.
 54. $14\frac{1}{4}$.
 55. $3\frac{9}{12}$.
 56. $\frac{8}{10}$.
 57. $\frac{1}{2}$.
 58. $\frac{8}{12}$.
 59. $\frac{3}{4}$.
 60. $15\frac{5}{8}$.
 61. $12\frac{1}{2}$.
 62. $\frac{1}{2} - \frac{9}{20} = \frac{1}{10}$
 $7 - \frac{1}{10} = 6\frac{9}{10}$ Ans.
 63. $\frac{3}{8} + \frac{7}{4} = \frac{19}{8}$
 $5 - \frac{10}{18} = 4\frac{10}{18}$ Ans.
 64. $7\frac{3}{4}$ miles.
 65. $4,650\frac{7}{8}$ miles.

Page 99.

66. $9\frac{1}{10}$ barrels.
 67. \$51.70.
 68. $\frac{3}{4}$.
 69. $13\frac{1}{2}$.

Page 100.

70. $15\frac{1}{2}$ A.
 71. $42\frac{1}{2}$ yd.
 72. $103\frac{1}{2}$ rd.
 73. $192\frac{1}{2}$ miles.
 74. 660 ft.; 5,280 ft.
 75. $187\frac{1}{2}$ pounds.
 76. $2,150\frac{1}{2}$ in.
 77. $502\frac{1}{2}$ days.

Page 101.

78. $160\frac{1}{2}$ days.
 79. $132\frac{1}{2}$.

Ex. Ans.

80. $114\frac{1}{10}$.
 81. $262\frac{1}{2}$.
 82. $14,244\frac{1}{2}$.
 83. $4,623\frac{1}{2}$.
 84. $7,906\frac{1}{2}$.

Page 102.

85. \$403.13.
 86. $124\frac{1}{2}$ bu.
 87. $217\frac{1}{2}$ oz.
 88. $262\frac{1}{2}$ qt.
 89. \$80.63.
 90. $177\frac{1}{2}$ lb.
 91. \$34.29.
 92. 204.
 93. $473\frac{1}{2}$.
 94. $107\frac{1}{2}$.
 95. $15,746\frac{1}{2}$.
 96. $20,143\frac{1}{2}$.
 97. $25,788\frac{1}{2}$.

Page 104.

98. $\frac{3}{14}$.
 99. $\frac{5}{28}$.
 100. $\frac{1}{8}$.
 101. $\frac{5}{27}$.
 102. $\frac{1}{2}$.
 103. $1\frac{1}{2}$.
 104. $202\frac{1}{2}$.
 105. $72\frac{1}{2}$.
 106. $1\frac{1}{2}$ m.
 107. \$267 $\frac{1}{10}$, or \$267.31.
 108. \$470 $\frac{1}{10}$, or \$470.31.
 109. $\frac{5}{24}$.
 110. \$9 $\frac{2}{100}$, or \$9.14.
 111. 420.
 112. $\frac{7}{18}$.
 113. $\frac{3}{8}$.

Page 106.

Ex.	Ans.
114.	$\frac{5}{8}$.
115.	$3\frac{5}{8}$.
116.	$\frac{3}{4}$ or $1\frac{1}{4}$.
117.	$\frac{65}{88}$.
118.	$\frac{68}{85}$.
119.	$7\frac{1}{4}$.

Page 106.

120.	$4\frac{1}{4}$ in.
------	--------------------

Page 107.

121.	$15\frac{7}{8}$ m.
122.	$5\frac{1}{2}$ yd.
123.	$5\frac{1}{2}$ rd.
124.	$22\frac{1}{4}$ ft.
125.	$\frac{4}{327}$.
126.	$\frac{8}{184}$.
127.	$\frac{8}{883}$.
128.	$\frac{8}{1085}$.
129.	$10\frac{4}{108}$.
130.	$4\frac{1}{2}$.
131.	$7\frac{3}{4}$.
132.	$13\frac{3}{8}$.
133.	$4\frac{1}{2}$.
134.	$13\frac{3}{8}$.

Page 109.

135.	$\frac{21}{137}$.
136.	$\frac{1}{138}$.
137.	$\frac{2}{51}$.
138.	14,661.
139.	1,152.
140.	9,720.
141.	132 lb.
142.	205 ft.
143.	$21\frac{3}{4}$.
144.	70.

Ex. Ans.

145.	140 .
146.	96.
147.	$1\frac{2}{31}$.
148.	$\frac{123}{160}$.
149.	3.
150.	$\frac{12}{13}$.
151.	24 bu.; $16\frac{2}{3}$ bu.
152.	250.

Page 110.

153.	$12,307\frac{2}{3}$ yd.
154.	$6\frac{2}{3}$ rd.
155.	$28\frac{3}{4}$ breadths.
156.	$15\frac{1}{3}$ yd.
157.	$240\frac{1}{4}$ lengths.
158.	$2\frac{1}{3}$ sq. rods.
159.	8 francs.

160.	$\frac{5}{2}$.
161.	$\frac{5}{8}$.
162.	$7\frac{3}{8}$.
163.	$\frac{4}{2167}$.
164.	$1\frac{1}{2}$.
165.	$\frac{5}{8}$.
166.	$\frac{1}{88}$.
167.	$1\frac{1}{2}$.
168.	$\frac{5}{13}$.
169.	$\frac{11}{2400}$.
170.	$3\frac{1}{2}$.
171.	$28\frac{1}{2}$.
172.	$\frac{100}{2820}$.
173.	$\frac{23}{51}$.
174.	$\frac{2208}{3893}$.
175.	$22\frac{662}{1225}$.

Page 112.

176.	18.
177.	$38\frac{1}{4}$.
178.	$1\frac{1}{10}$.

Ex. Ans.

179.	$13\frac{1}{2}$.
180.	$\frac{113}{114}$.
181.	$5\frac{5}{8}$.
182.	$1\frac{1}{3}$.
183.	\$363.80.
184.	$\frac{3}{8}$ acre.
185.	\$660,000.
186.	\$576.
187.	\$2,724.15.
188.	\$4,225.92.
189.	{ Infantry, 4,200; { Cavalry, 600.
190.	{ 1st y. 1,840 bu. { 2d y. 2,300 bu.
191.	165.
192.	330 fowls.

Page 114.

193.	$\frac{3}{11}$.
194.	$\frac{1}{111}$.
195.	$\frac{1}{2}$.
196.	\$21; \$15; \$24; \$12.
197.	$\frac{2}{3}$.
198.	$\frac{1}{3}$.
199.	$\frac{1}{72}$.
200.	$\frac{2}{3}$.
201.	$\frac{20}{133}$.
202.	$\frac{2}{23}$.
203.	$\frac{4}{7}$.
204.	$\frac{121}{132}$.
205.	$\frac{104}{145}$.
206.	$\frac{1}{3}, \frac{2}{3}, \frac{7}{8}, \frac{3}{8}, \frac{1}{8}, \frac{5}{8}$.
	$\frac{1}{16}, \frac{9}{16}$.

Page 115.

207.	$59\frac{1}{10}$.
208.	$25\frac{2}{3}$.
209.	35,750.
210.	$39\frac{1}{4}$.
211.	45,600.
212.	$18,262\frac{1}{4}$.

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Ex.	Ans.
213.	$2 \times 2 \times 3 \times 5 \times 7$.
214.	$3\frac{3}{8}$.
215.	7.
216.	252.
217.	$\frac{1}{2}\frac{1}{2}$; $\frac{1}{4}$.
218.	$2\frac{1}{2}\frac{1}{4}$; $2\frac{1}{8}\frac{1}{2}$.
219.	$137\frac{1}{2}$; 6.
220.	$\frac{1}{2}\frac{1}{2}\frac{1}{4}$; $\frac{1}{2}\frac{1}{2}\frac{1}{8}$; $\frac{1}{2}\frac{1}{4}\frac{1}{8}$.
221.	$\frac{3}{8}$; $\frac{1}{8}$; $\frac{3}{8}\frac{3}{8}$.
222.	$9\frac{1}{2}$; $78\frac{1}{2}$.
223.	$11\frac{1}{2}$; $\frac{5}{16}$.
224.	$29\frac{1}{2}$; 37; $3\frac{1}{16}$.
225.	$\frac{4}{8}\frac{8}{8}$.
226.	$1\frac{1}{8}$; $\frac{7}{8}$.
227.	$\frac{1}{16}$; $\frac{1}{16}$; $1\frac{1}{16}$.
228.	$\frac{3}{4}$.
229.	$39\frac{2}{5}$ miles.
230.	\$ 6.25.
231.	\$ 31.50.
232.	Amt. \$ 85.78.

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233.	\$ 8.75.
234.	\$ 8.17.
235.	\$ 8,523.54.
236.	\$ 14.63.
237.	\$ 7.29.
238.	25 ¢.
239.	\$ 11,623.13.
240.	\$ 14,262.50.
241.	\$ 21.66.
242.	\$ 55.91.
243.	$5\frac{7}{8}$ mo.
244.	\$ 52.80.
245.	$2\frac{7}{8}$.
246.	$114\frac{2}{3}$.

Ex. Ans.

247.	$127\frac{1}{2}$.
248.	\$ 37.34.
249.	\$ 2.60.

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250.	$252\frac{1}{2}$ days.
251.	$17\frac{5}{14}$ ¢.
252.	\$ 2.16.
253.	\$ 18,000; \$ 27,000.
254.	\$ 36.50.
255.	\$ 3,600; \$ 450.
256.	$144\frac{3}{4}$ feet.
257.	$793\frac{1}{2}$ days.
258.	$15\frac{3}{8}$ rods.
259.	$78\frac{1}{2}$.
260.	\$ 143.75.
261.	$89\frac{2}{3}$.
262.	$95\frac{1}{2}\frac{1}{2}$ sq. yds.
263.	$1\frac{7}{16}$.
264.	\$ 33.89.

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265.	$\left\{ \begin{array}{l} \$ 119.93\frac{3}{4} ; \\ 623\frac{4}{7} \text{ fr.} \end{array} \right.$
266.	216 lb.
267.	$25\frac{2}{3}$ lb.
268.	\$ 5,833.33.
269.	\$ 8.75.
270.	$21\frac{3}{8}$ miles.
271.	$27\frac{1}{2}$ hours.
272.	\$ 825.42.
273.	$16\frac{3}{8}$.
274.	\$ 42,666.67.*
275.	$\left\{ \begin{array}{l} 800 \text{ in all.} \\ 180 \text{ G., } 200 \text{ F., } 80 \text{ Sc.,} \\ 100 \text{ E., } 120 \text{ Sw.} \end{array} \right.$
276.	\$ 600.00.
277.	$3\frac{1}{2}$ days.

Ex. Ans.

278.	$4\frac{1}{2}$ days.
279.	$5\frac{1}{2}$ days.
280.	$6\frac{2}{15}$ days.

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For answers to drill exercises on Table No. 5, see page 57 of this Key.

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1.	0.070.
2.	$\left\{ \begin{array}{l} 0.400 ; 0.750 ; \\ 2.500 ; 1.060. \end{array} \right.$
3.	$\left\{ \begin{array}{l} 0.0030 ; 1.7500 ; \\ 0.0060. \end{array} \right.$
4.	3.000; 3.0000.
5.	$\left\{ \begin{array}{l} 7.0 \quad 7.00 \quad 7.0000 \\ 40.0 \quad 40.00 \quad 40.0000 \\ 37.0 \quad 37.00 \quad 37.0000 \end{array} \right.$
6.	$\frac{2}{5}$. $16.\frac{3}{4}$.
7.	$\frac{4}{5}$. $17.\frac{4}{125}$.
8.	$\frac{7}{20}$. $18.\frac{2}{3}$.
9.	$\frac{3}{4}$. $19.\frac{2}{3}$.
10.	$\frac{3}{4}$. $20.\frac{9}{125}$.
11.	$\frac{1}{3}$. $21.\frac{1}{16}$.
12.	$\frac{3}{8}$. $22.\frac{8}{10000}$.
13.	$\frac{5}{8}$. $23.\frac{1}{4}$.
14.	$\frac{7}{8}$. $24.\frac{1}{2}$.
15.	$\frac{7}{8}$. $25.\frac{1}{6}$.

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26.	0.625.
27.	0.35.
28.	0.024.
29.	3.0625.
30.	5.125.
31.	20.03125.
32.	1.078125.
33.	8.75.

Ex. Ans.
34. 17.1171875.

35. 1.0612.

36. 0.0475.

37. 0.03125.

38. 2.225.

39. 2.975.

40. 1.6075.

41. 16.9875.

42. \$54.59.

43. 111.875.

44. \$4.70.

45. 16.485 acres.

46. 1.9307734...

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47. 2.1071.

48. 58.6881.

49. 0.3724.

50. 11.5953 hours.

51. 139.8837 rods.

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52. 0.3.

53. 0.83.

54. 0.428571.

55. 0.5.

56. 0.916.

57. 0.571428.

58. 0.38.

59. 0.045.

60. 0.63.

61. 0.0416.

62. 1.153846.

63. 3.135.

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64. $\frac{1}{3}$. 67. $\frac{1}{3}$.

65. $\frac{2}{3}$. 68. $\frac{2}{3}$.

66. $\frac{1}{3}$. 69. $\frac{2}{3}$.

Ex. Ans. Ex. Ans.
70. $\frac{1}{3}$. 77. $\frac{1}{3}$.

71. $\frac{2}{3}$. 78. $\frac{1}{3}$.

72. $\frac{1}{3}$. 79. $\frac{2}{3}$.

73. $\frac{1}{3}$. 80. $\frac{1}{3}$.

74. $\frac{2}{3}$. 81. $\frac{1}{3}$.

75. $\frac{1}{3}$. 82. $\frac{2}{3}$.

76. $\frac{2}{3}$. 83. $\frac{1}{3}$.

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84. 0.432.

85. 0.918.

86. 1.5.

87. 4.704.

88. 42.

89. 4.704.

90. 10.23.

91. 0.01648.

92. 0.37418.

93. 0.648.

94. 128.94.

95. 1.516.

96. 220.

97. 93.163.

98. 1.0125.

99. 153.5625.

100. 462.825.

101. 380.

102. 7,501.

103. 7,500.0000001.

104. 5,290.5687.

105. 1,136.2963.

106. \$2,471.10.

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107. 48 books.

108. 19 $\frac{1}{2}$ yards.

109. 6 rods.

110. { 75 qt. dry.
87 $\frac{1}{11}$ qt. liquid.

Ex. Ans.

111. 0.5 ton.

112. 200 yards.

113. 2.13.

114. 5.5.

115. 4.

116. 0.36.

117. 111.

118. 7,720.

119. 15.49.

120. 0.3.

121. 0.094.

122. 0.1003...

123. 1538.4615...

124. 6,275.

125. 950.

126. 10,050.

127. 0.0071.

128. 0.0497—

129. 0.0066—

130. 42.08.

131. 649.084.

132. 43.08.

133. 0.1234.

134. 25.1045...

135. 0.2342—

136. 74.0762—

137. 11,728.8.

138. 2,877.617.

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For answers to drill exercises on Table No. 6, see page 64 of this Key.

Page 147.

1. 133,608 oz.

2. \$640.00.

3. 62 $\frac{1}{2}$ ft.

4. \$191.40.

- Ex. Ans.
 5. 43,560 sq. ft.
 6. 1,955 acres.
 7. 46,656 cu. in.
 8. \$7.21.
 9. \$16.56.

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10. 42,048,000 times.
 11. 14,608 hours.
 12. 52,594,560 min.
 13. { 1,625.26 common
 miles.

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14. 1 m. 274 rd. 1 yd.
 15. 284 rd. 1 ft.
 16. 60 A. 87 sq. rd.
 17. { 1 A. 28 sq. rd. 5
 sq. yd.
 18. { 3 sq. yd. 6 sq. ft.
 39 sq. in.
 19. 14° 54' 44".
 20. 4 T. 1,328 lb.
 21. 1,221 lb. 11 oz.
 22. 38 lb. 10 oz. 1 pwt.
 23. 4 oz. 7 pwt. 1 gr.
 24. 158 bu. 3 pk. 7 qt.
 25. 2 y. 53 d. 4 h. 33 m.
 26. { 1 lb. 5 oz. 3 pwt.
 18 gr.
 27. 1 lb. 5 oz. 10 pwt.
 28. 7,899 $\frac{1}{4}$ miles.
 29. { 30 $\frac{1}{2}$ bu., or
 30 bu. 1 pk. 5 qt.

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30. 3 yd. 2 ft.
 31. { 203 rd. 3 yd. 1 ft.
 6 in.

- Ex. Ans.
 32. { 203 A. 101 sq. rd.
 24 sq. yd. 6 sq. ft.
 108 sq. in.
 33. { 42 sq. rd. 20 sq. yd.
 1 sq. ft. 72 sq. in.

34. 1,750 lb.
 35. 10 oz. 10 pwt.
 36. 10 cu. ft. 864 cu. in.
 37. 1 pt. 1 gi.
 38. { 2 pk. 3 qt. 0 pt.
 1 $\frac{1}{2}$ gi.
 39. 33' 20".

40. 81 d. 2 h. 40 m.
 41. 274 d. 12 h.
 42. \$6,534.00.
 43. 64 doses.
 44. 6,930 planks.

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45. $\frac{2}{3}$ gal.
 46. $\frac{1}{2}$ m.
 47. $\frac{3}{4}$ rd.
 48. $\frac{5}{11}$ A.
 49. $\frac{1}{2}$ cu. yd.
 50. $\frac{1}{2}$ year.
 51. 0.2738— mile.

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52. 0.8452 A.
 53. 0.55 y.; 0.73 $\frac{1}{2}$ y.; 0.49 $\frac{1}{2}$ y.

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54. 135 gal. 2 qt.
 55. { 50 A. 130 sq. rd.
 49 sq. ft.
 56. 78 m. 207 rd.
 57. 13° 39' 8".
 58. 16 d. 13 h.

- Ex. Ans.
 59. 2 pk. 3 $\frac{1}{2}$ qt.
 60. 205 $\frac{3}{4}$ rd.
 61. 554 $\frac{1}{2}$ lb.

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62. 3 bu. 1 pk. 3 qt.
 63. 2 oz. 14 pwt. 19 gr.
 64. 15° 52' 40".
 65. 84 rd. 4 $\frac{1}{2}$ yd.
 66. 5 ft. 6 in.
 67. 511 A. 154 $\frac{1}{2}$ sq. rd.
 68. 7 oz. 16 $\frac{1}{2}$ pwt.
 69. 8 h. 19 m. 46.2 s.
 70. C.Horn, 21° 36' 4".
 71. 13° 50' 7".
 72. 11° 3' 21".
 73. 86° 27' 17".
 74. 149° 14' 43".
 75. 74°.

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76. 6 qt. 1 gi.
 77. 40 bu. 1 pk. 7 qt.
 78. 258 m. 166 rd.
 79. 1 pk. 3 qt. 1 pt.
 80. 1 A. 50 $\frac{1}{2}$ sq. rd.
 81. 8 m. 14 $\frac{1}{2}$ s.
 82. 49 men.
 83. 154 bins.
 84. 6 h. 14 m. 10 s.

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85. 64° 15'.
 86. 32° 15'.
 87. 93° 2' 30".
 88. 16° 21' 15".
 89. 45° W.
 90. 1° 15' E.

- Ex. Ans.
91. 18° E.
92. 62° W.

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93. $\begin{cases} 16^{\circ} 15' 13''; \\ 90^{\circ} 15' 16'' \text{ W.} \end{cases}$
94. $167^{\circ} 48' 45''$ E.
95. 10 m. $45\frac{1}{15}$ s.
96. 4 h. 55 m. $37\frac{2}{3}$ s.
97. 1 h. 6 m. 48 s.
98. 49 m. 40 s.

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99. 7 m. $31\frac{1}{2}$ s. P. M.
100. 11 o'cl. 7m. $43\frac{1}{2}$ s. A. M.
101. 11 o'cl. 17m. $51\frac{1}{2}$ s. A. M.
102. 8 o'cl. 58m. $26\frac{1}{2}$ s. A. M.
103. 5 o'cl. 58m. $7\frac{2}{5}$ s. P. M.
104. 6 o'cl. 1m. $46\frac{1}{15}$ s. P. M.
105. 5 o'cl. 17m. $32\frac{2}{3}$ s. P. M.
106. 11 o'cl. 1m. $27\frac{1}{2}$ s. P. M.

NOTE. The pupil will perform the examples in Mensuration more intelligently if he makes diagrams of the plane figures and uses blocks or boxes to represent the solid bodies.

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107. $28\frac{1}{2}$ yd.
108. $37\frac{1}{2}$ yd.
109. \$41.25.
110. 5,476 sq. ft.
111. \$5,197.50.
112. 121 ft.
113. \$2,178.00.
114. 164 sq. rd.
115. 2 sq. rd.
116. $20\frac{2}{1000}$ A.
117. \$34,456.64.

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- Ex. Ans.
118. \$400.00.
119. 1,696 cu. in.
120. $1,546\frac{7}{8}$ lb.
121. $6\frac{3}{4}$ ft.
122. $17\frac{1}{2}$ sq. yd.
123. $22\frac{3}{4}$ ft.

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124. $8\frac{8}{11}$ ft.
125. \$54.66.
126. $9\frac{1}{4}$ ft.
127. 42¢.
128. 99 ft.
129. 45 ft.
130. 2,400 ft.
131. 120 ft.
132. 81 ft.

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133. \$12.21.
134. \$0.95.
135. $51\frac{3}{4}$ qt.
136. $168\frac{3}{4}$ gal.

$$\begin{cases} 74 - 10 = 64 \\ 64 \div 62\frac{1}{2} = 1.024 \\ \text{Ans. } 1.024 \text{ cu. ft.} \\ 7.66... \text{ gal.} \end{cases}$$

138. $45\frac{84855}{107821}$ bu.
139. $19\frac{1}{2}$ bu.

$$140. \begin{cases} \frac{47 \times 231 \times 4}{2150.42 \times 5} = \\ 4\frac{4128}{107821} \text{ bu.} \end{cases}$$

141. 7.664 cu. in.
142. 40 bu.; 32 bu.

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143. 27,101 ft.
144. 10 oz. 2 pwt. 17 gr.

- Ex. Ans.
145. 16 cu. ft. 1,512 cu. in.
146. \$48.00.
147. \$0.75.
148. 0.695° .
149. 0.1045... rd.
150. $\frac{5}{8}$ acre.
151. 185 d. 19 h. 28 m.
152. $\begin{cases} 87 \text{ sq. rd. } 8 \text{ sq. yd.} \\ 8 \text{ sq. ft. } 36 \text{ sq. in.} \end{cases}$
153. $\begin{cases} 2 \text{ lb. } 5 \text{ oz. } 3 \text{ pwt.} \\ 8 \text{ gr.} \end{cases}$
154. 2,079 sq. ft.
155. 1,920 cu. ft.

$$156. \begin{cases} 420 \times 231 \times 4 \\ 12 \times 12 \times 12 \times 49 \\ 4\frac{1}{12} \end{cases} =$$

Ans. 4 ft. 7 in.

$$157. \begin{cases} \frac{62\frac{1}{2} \times 4}{144} = 1\frac{5}{8} \\ \text{Ans. } 1 \text{ lb. } 11\frac{1}{8} \text{ oz.} \end{cases}$$

158. 900 bricks; \$8.10.
159. 1.
160. $1\frac{1}{8}$.
161. $\begin{cases} 1\frac{3}{4} \div \frac{3}{4} = 5\frac{1}{2}. \text{ As} \\ \text{no breadth is to be} \\ \text{divided, 6 breadths} \\ \text{will be required.} \\ \text{Ans. } 26 \text{ yards.} \end{cases}$

162. 28 m. $32\frac{4}{15}$ s.
163. $46^{\circ} 1' 30''$.
164. 423 d.

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165. 25¢.
166. \$2.91.
167. 60 furrows.
168. 11 oz. 0 pwt. 15 gr.
169. 31 sq. ft.
170. \$379.50.
171. 768.

Ex.	Ans.	Page 171.	Ex.	Ans.
172.	2° 13' 47 $\frac{3}{4}$ ".	For answers to drill exercises on Table No. 7, see page 69 of this Key.	32.	\$ 8.40.
173.	40 rd. 2 yd. 8 in.		33.	217.5 ca.; 2.175 a.
174.	17 d. 1 h. 30 m.		34.	4,585.76 a.
175.	\$ 68.75.	Page 174.	35.	\$ 6,556.57.
176.	$\left\{ \begin{array}{l} 321 \text{ } \overline{48759} \text{ bu. or} \\ 320 \text{ bu. rough estimate.} \end{array} \right.$	Ex. Ans.		Page 180.
177.	\$ 16.50.	1. 0.1 m.	36.	12.043044049 cu. m.
178.	$\left\{ \begin{array}{l} 78 \text{ A. 135 sq. rd. sons'.} \\ 87 \text{ A. 115 sq. rd. dau's'.} \end{array} \right.$	2. 1.3 m.	37.	153.41 cu. m.
179.	48 yd.	3. 21.4 m.	38.	\$ 373.72 $\frac{1}{2}$.
	Page 167.	4. 0.01 m.	39.	369.6 loads.
180.	1,860,000 yd.	5. 0.38 m.	40.	\$ 29.25.
181.	18 lb. 10 $\frac{1}{4}$ oz.	6. 5.29 m.	41.	12 m.; \$ 20.25.
182.	72 sq. ft.	7. 0.001 m.		Page 181.
183.	\$ 0.27 $\frac{1}{12}$.	8. 0.048 m.	42.	20 $\frac{1}{2}$.
184.	\$ 5.50.	9. 3.675 m.	43.	\$ 1.23.
185.	11 $\frac{1}{2}$ cd.	Page 177.	44.	75 l.
186.	\$ 7.45.	10. 4,250 m.	45.	39 HI.
187.	\$ 37.75.	11. 3,500 m.	46.	4.5 m.
188.	286 $\frac{1}{4}$ gal.	12. 23,500 m.		Page 182.
189.	\$ 51.75.	13. 9,460 m.	47.	\$ 3.09.
190.	\$ 44.55.	14. 9,240 m.	48.	\$ 2.31.
191.	92 $\frac{3}{10}$ d.	15. 397 m.	49.	135 grams.
	$\left\{ \begin{array}{l} \text{Top of block, 2 sq. ft.} \\ \text{Area of sides, } 3\frac{3}{4} \text{ "} \\ \text{Sum, } 5\frac{3}{4} \text{ "} \end{array} \right.$	16. 720 m.	50.	5.4 T.
192.	$\left\{ \begin{array}{l} 17 \times 4 = 68 \\ 3 \times 9 \times 3 = 81 \\ \text{Ans. } \frac{68}{81} \text{ yard.} \end{array} \right.$	17. 7.3 m.		Page 184.
193.	\$ 40.08.	18. 50 m.	51.	157.4 ft.
194.	66,825 stones.	19. 67.678 m.	52.	31.0685 m.
	Page 168.	20. 649.115 m.	53.	44.478 A.
195.	$\left\{ \begin{array}{l} 1 \text{ h. 53 m. } 35\frac{7}{15} \text{ s.} \\ \text{after midnight.} \end{array} \right.$	21. 415,990 m.	54.	2.04724 in.
196.	7 gr. gr. 3 gr. 6 doz.	22. 5.26749 Km.	55.	188.71376 lb.
197.	$\left\{ \begin{array}{l} 1 \text{ h. } 8\frac{4}{7} \text{ m.} \\ 3 \text{ h. } 54\frac{2}{3} \text{ m.} \end{array} \right.$	23. 35,000 m.	56.	6,340.08 gal.
		24. 86.62 m.	57.	22.046 T.
		25. 15,480 m.	58.	40.2325 Km.
		26. 71 $\frac{2}{3}$ m.	59.	80.94 Ha.
		27. 73.50672 Km.	60.	2,265.36 l.
		28. 22.2075 m.	61.	15.087 m.
		29. 300 times.	62.	17.5065 $\frac{1}{2}$ l.
		Page 179.		
		30. 23.85 sq. m.		
		31. 20 m.		

Ex. Ans.
63. 618.95...
64. 88.9056 ^{Kg}.

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1. \$112.80.
2. \$62.65.
3. 1,240 men.
4. \$0.108.
5. 90 days.
6. 14.28 lbs.
7. 438,120.
8. 1,500 ft.
9. 10,500.
10. 9,396.
11. \$1.27.
12. 131.4 ft.
13. 45 in.
14. \$8.32.

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15. \$1,600; \$480.
16. 1,816 $\frac{2}{3}$ d.; 5,450 d.
17. 627; 209.
18. 4,000; 6,000.
19. 210; 294.
20. 3 $\frac{1}{2}$; 160.
21. 6,375.
22. \$5,208; \$15,624.
23. \$200.00.
24. \$1,488.00.
25. \$214.29.
26. 60 ¢.
27. \$500.00.
28. \$1,041.67.
29. \$1,250.00.

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30. 40 years.
31. 600.

Ex. Ans.
32. \$4.00.
33. \$11,250,000.
34. 25%; 50%; 17 $\frac{1}{2}$ %.
35. 4%; 125%; $\frac{1}{3}$ %.
36. 166 $\frac{2}{3}$ %.
37. $\left\{ \begin{array}{l} 93 \frac{1}{2}\% ; 94 \frac{3}{4}\% ; \\ 89 \frac{1}{2}\% ; 90 \frac{3}{4}\% . \end{array} \right.$

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38. 73 $\frac{1}{18}$ %.
39. 5 $\frac{1}{12}$ %.

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40. \$7,936.72.
41. \$1,000.00.
42. \$1.05.
43. \$5,970.00.
44. \$2,400.00.
45. \$7,000.00.
46. \$330.00.
47. 24 $\frac{1}{2}$ %.
48. \$577.78.
49. 25%.
50. 37 $\frac{1}{2}$ %.
51. \$1.02; \$1.44; \$1.80.
52. 6%.
53. 128 $\frac{4}{5}$ %.
54. 108 $\frac{4}{5}$ %.
55. 33 $\frac{1}{3}$ %.

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56. \$3.56.
57. \$91,575.
58. \$6.50; \$74.79.
59. \$8.50; \$161.50.
60. \$81.60.
61. \$6,151.56.

Ex. Ans.
62. \$5,729.75.
63. 3%.
64. \$1,200.00.

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65. 500 barrels.
66. 20 acres.
67. 2%.
68. 30%.
69. \$637.80.

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70. \$1,101.50.
71. \$1,765.00.
72. \$1,505.25.
73. \$3,281.25.
74. \$3,615.00.
75. \$8,903.50.

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76. \$1,468.25.
77. \$2,100.
78. \$2,500.
79. 50%.
80. \$205.
81. \$258.75.
82. $\left\{ \begin{array}{l} 102 \frac{7}{8} + \frac{1}{4} = 103 \frac{1}{8} \\ \frac{4.86 \times 6 \times 103 \frac{1}{8}}{100} = 30.07 \\ \text{Ans. } \$30.07. \end{array} \right.$
83. $\left\{ \begin{array}{l} \frac{100}{108} = 0.97 \frac{1}{9} \\ \text{Ans. } 97 \frac{1}{9} \% . \end{array} \right.$

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84. \$10.00.
85. \$66.00.
86. \$145.80.
87. \$81.25.
88. 1 $\frac{1}{2}$ %.
89. \$13.50.

Ex.

53.	Principal, . . .	\$ 1000.00	from October 5, 1874,
	Interest, . . .	10.50	to December 8, 1874.
	Amount, . . .	1010.50	{ T. 2 m. 3 d. Ratio, 0.010 $\frac{1}{2}$.
	1st payment, . .	125.00	
	2d principal, . .	885.50	from December 8, 1874,
	Interest, . . .	22.73	to May 12, 1875.
	Amount, . . .	908.23	{ T. 5 m. 4 d. Ratio, 0.025 $\frac{3}{4}$.
	2d payment, . .	316.00	
	3d principal, . .	592.23	from May 12, 1875,
	Interest, . . .	10.96	to September 2, 1875.
54.	Amount, . . .	603.19	{ T. 3 m. 21 d. Ratio, 0.0185.
	3d payment, . .	417.00	
	Amount, . . .	186.19	from September 2, 1875,
	Interest, . . .	5.80	to March 9, 1876.
		\$ 191.99	{ T. 6 mo. 7 d. Ratio, 0.031 $\frac{1}{8}$.
			Ans. \$ 191.99.
	Principal, . . .	\$ 985.00	from September 1, 1875,
	Interest, . . .	20.88	to January 15, 1876.
	Amount, . . .	955.88	{ T. 2 m. 3 d. Ratio, 0.022 $\frac{3}{4}$.
	1st payment, . .	125.75	
54.	2d principal, . .	830.13	from January 15, 1876,
	Interest, . . .	59.49	to March 25, 1877.
	Amount, . . .	889.62	{ T. 1 y. 2 mo. 10 d. Ratio, 0.071 $\frac{3}{8}$.
	2d payment, . .	250.00	
	3d principal, . .	639.62	from March 25, 1877,
	Interest, . . .	4.80	to May 10, 1877.
	Amount, . . .	644.42	{ T. 1 mo. 15 d. Ratio, 0.007 $\frac{1}{2}$.
	3d payment, . .	300.00	
	4th principal, . .	344.42	from May 10, 1877,
	Interest, . . .	85.59	to July 1, 1881.
		\$ 430.01	{ T. 4 y. 1 mo. 21 d. Ratio, 0.2485.
			Ans. \$ 430.01.

Ex.

55.	Principal, . . .	\$ 425.00	from July 13, 1869,
	Interest, . . .	52.91	to August 9, 1871 (2 y. 27 d. 0.124 $\frac{1}{2}$).
	Interest, . . .	32.44	to Nov. 17, '72 (1 y. 3 mo. 8 d. 0.076 $\frac{1}{2}$).
	Amount, . . .	510.35	
	1st & 2d payt. . .	200.00	required to cancel interest.
	2d principal, . .	310.35	from Nov. 17, 1872,
	Interest, . . .	12.16	to July 12, 1873 (7 mo. 25 d. 0.039 $\frac{1}{2}$).
	Amount, . . .	\$ 322.51	Ans. \$ 322.51.
	Principal, . . .	\$ 800.00	from July 15, 1870,
	Interest, . . .	42.47	to April 18, 1871 (9 mo. 3 d. 0.053 $\frac{1}{12}$).
56.	Amount, . . .	842.47	
	1st payment, . .	100.00	
	2d principal, . .	742.47	from April 18, 1871,
	Interest, . . .	88.50	to Dec. 31, '72 (1 y. 8 mo. 13 d. 0.119 $\frac{7}{8}$).
	Interest, . . .	75.65	to June 14, '74 (1 y. 5 mo. 14 d. 0.101 $\frac{5}{8}$).
	Interest, . . .	56.30	to July 14, '75 (1 y. 1 mo. 0.075 $\frac{5}{8}$).
		962.92	
	2d & 3d payts. .	132.50	required to cancel interest.
		\$ 830.42	Ans. \$ 830.42.

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57.	Prin. \$10,000.75	from Oct. 3 to Dec. 3, '75 (2 mo.), amounts to . .	\$10,100.76
	" 672.41	" Nov. 5 " Dec. 3 (28 d.) amounts to	\$ 675.55
	" 7,682.42	" Nov. 15 " Dec. 3 (18 d.)	7,705.47
	" 437.98	" Nov. 16 " Dec. 3 (17 d.)	439.22
	" 833.42	" Nov. 19 " Dec. 3 (14 d.)	835.36
			<u>9,655.60</u>
		Ans. \$ 445.16.	\$ 445.16

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58.	Prin. \$1,200.00	from April 1, '75, to April 1, '76 (1 y.),	\$1,284.00
	" 161.08	" April 12, '75, " April 1, '76 (11 mo. 20 d.),	\$ 172.04
	" 224.14	" July 19, '75, " April 1, '76 (8 mo. 13 d.),	235.17
	" 17.90	" July 28, '75, " April 1, '76 (8 mo. 4 d.)	18.75
	" 100.25	" Jan. 29, '76, " April 1, '76 (2 mo. 3 d.)	101.48
			<u>1,521.44</u>
		Ans. \$ 756.56.	\$ 756.56

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Ex.	Ans.
59. 10 mo.	
60. 3 years.	
61. 1 y. 6 mo.	
62. 1 y. 4 mo. 12 d.	
63. 5 y. 6 mo. 20 d.	
64. 5 y. 4 mo. 3 d.	
65. 1 y. 6 mo.	
66. 6 mo.	
67. $\left\{ \begin{array}{l} 100 \text{ y.}; 50 \text{ y.}; 88 \text{ y.} \\ 4 \text{ mo.}; 16 \text{ y. 8 mo.}; \\ 10 \text{ y.} \end{array} \right.$	
68. 8%.	
69. $2\frac{2}{3}\%$.	

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70. $4\frac{1}{2}\%$.
71. 9%.
72. $3\frac{1}{2}\%$.
73. 2%.
74. $5\frac{1}{4}\%$.
75. 10%.

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76. \$ 125.00.
77. \$ 100.00.
78. \$ 1,020.00.
79. \$ 68.20.
80. \$ 72.00.
81. \$ 600.00.
82. \$ 600.00.
83. \$ 2,063.65.
84. \$ 400.
85. \$ 83.86.
86. \$ 300.00.
87. \$ 200.00.

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88. \$ 25; \$ 2.50.
89. \$ 97.08; \$ 3.88.

Ex.

Ans.

90. \$ 197.04; \$ 2.96.	
91. \$ 167.69; \$ 8.11.	
92. \$ 650; \$ 11.37 $\frac{1}{2}$.	
93. \$ 1,540; \$ 69.30.	
94. \$ 590.16.	
95. \$ 123.64.	
96. \$ 1,533.85.	
97. $\left\{ \begin{array}{l} \text{Received for grain, . } \$ 1,650.00 \\ \text{P. W. of } \$ 1,500, . \end{array} \right.$	$\underline{1,442.31}$
	Ans. \$ 207.69
98. $\left\{ \begin{array}{l} \text{Cost of books, } \$ 152.00 \\ \text{P. W. of } \$ 240, \end{array} \right.$	$\underline{235.87}$
	Gain, . \$ 83.87 Ans. \$ 83.87.

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99. \$ 4.13; \$ 745.87.
100. \$ 18.08; \$ 981.92.
101. \$ 8.20; \$ 291.80.
102. \$ 14.00; \$ 686.00.
103. (Time, 95 d.) \$ 9.90; \$ 490.10.

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104. $\left\{ \begin{array}{l} \text{(Due Feb. 28/Mar. 3. Time, 63 d.)} \\ \$ 4.57; \$ 285.43. \end{array} \right.$	
105. \$ 5.25; \$ 494.75.	
106. \$ 4.11; \$ 252.73.	
107. $\left\{ \begin{array}{l} \text{(Due April 30/May 3. Time, 56 d.)} \\ \$ 9.33; \$ 1,190.67. \end{array} \right.$	
108. $\left\{ \begin{array}{l} \text{Amount of } \$ 324 \text{ for } 1 \text{ y. } 3 \text{ d.} \\ \text{at } 6\%, \$ 343.60 \\ \text{Discount of } \$ 343.60 \text{ for } 99 \text{ d.} \\ \text{at } 7\%, 6.61 \\ \text{Avails, } \$ 336.99 \\ \text{Ans. } \$ 336.99. \end{array} \right.$	

- Ex. 109. { Amount of \$4000 for
6 mo. 3 d. at 10%, \$4,203.33
Disc't of \$4,203.33
for 88 d. at 10%, . 102.75
Ans. { \$102.75, discount.
\$4,100.58, avails.

Ans. Page 229.

110. \$80.44.

111. \$500.00.

112. \$1,500.00.

113. \$950.00.

114. { By true discount, \$178.571
By bank discount, 175.867
Ans. \$2.70

115. { Bank discount } . \$178.83
(Time, 117 d.) }
True discount } 171.00
(Time, 3 mo. 24 d.) }
Ans. \$7.83

116. \$492.61.

117. (Time, 34 d.) \$497.17.

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118. \$506.00.

119. (Time, 2 mo.) \$4.95.

120. (Time, 64 d.) \$5.33.

121. \$117.80.

122. \$421.38.

123. \$310.05.

124. \$33.33.

125. \$1.20.

126. \$65.00.

127. { $\frac{\$1.33 \times 10 \times 5}{9 \times 4} = \$1.85.$

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128. \$238.20.

129. \$426.03.

130. \$2,513.04.

131. \$2,217.44.

Ex. Ans.

132. \$2.86.

133. \$60.00.

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134. \$234.32.

135. \$915.71.

136. \$85.16.

137. \$45.06.

138. \$2,396.56.

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139. { Due. Items. Days. Int.
March 31, \$400 0
April 30, . 300 30 \$3.00
May 30, . 200 60 4.00
1 day's int. of \$900 = 0.30 7.00 (23
Mar. 31 + 23 d. = Apr. 23. Ans.

140. { Due. Items. Days. Int.
Nov. 5, . \$800 0
Dec. 8, . 800 33 \$8.80
Feb. 3, . 800 90 24.00
1 day's int. of \$2,400 = 0.8 32.80
41
Nov. 5 + 41 d. = Dec. 16. Ans.

141. { Due. Items. Days. Int.
Sept. 10, . \$900 0 0
Oct. 21, . 2,250 41 30.75
Oct. 28, . 1,050 48 16.80
1 day's int. of \$4,200 = 0.14 47.55
33.9
Sept. 10 + 34 d. = Oct. 14. Ans.

142. { Due. Items. Mos. Int.
\$430 0
270 4 \$10.80
300 3 9.00
1 mo.'s int. of \$1,000 = \$10 19.80
1.98
1.98 mo. = 1 mo. 29 d.
Ans.
5 mo. + 1 mo. 29 d. = 6 mo. 29 d.

Ex.	Ans.	Ex.	Ans.
143.	6 mo. 13 d.	144.	15 mo.
	Due. Items.		Mos. Int.
	May 10 th . . \$ 200		0
	July 15, . . 300		66 \$ 6.60
	July 3, . . 520		54 9.86
145.	July 18, . . 250		69 5.75
	1 day's int. of \$1,270 = 0.42½)		21.71
			51
	May 10 + 51 d. = June 30. Ans. June 30, 1876.		

	Due. Items. Days. Int.	
	April 10, . . \$ 438 0	
	April 28, . . 254 18 \$ 1.524	
	April 29, . . 145 19 0.918½	
146.	July 7, . . 300 88 8.800	
	July 12, . . 159 93 4.929	
	1 day's int. of \$1,296 = 0.432)	16.171½
		37
	April 10 + 37 d. = May 17. Ans. May 17, 1876.	

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	Date. Dr. Items. Days. Int.		Date. Cr. Items. Days. Int.				
	April 1, . \$ 1,000 0 0		April 14, . \$ 1,393 13 \$ 6.04				
	July 8, . 119 98 \$ 3.89		Aug. 10, . 94 131 4.10				
147.	\$ 1,119 \$ 3.89		\$ 1,487 \$ 10.14				
			1,119 3.89				
	1 day's int. of \$ 368 = 0.122)						6.25
	April 1 + 51 d. = May 22. Ans. May 22, 1877.						51

	Date. Dr. Items. Days. Int.		Date. Cr. Items. Days. Int.	
	June 5, . \$ 400 0		July 31, \$ 250 56 \$ 4.67	
	Sept. 5, . 600 92 \$ 8.40		Aug. 7, 700 63 14.70	
	Sept. 15, . 200 102 6.80		Aug. 13, 200 69 4.60	
148.	\$ 1,200 \$ 25.20		\$ 1,150 \$ 23.97	
	1,150 23.97			
	1 day's int. of \$ 50 = 0.016½)			
				1.23
				74
	June 5 + 74 d. = Aug. 18. Ans. Aug. 18, 1876.			

Ex.

	Dr.				Cr.			
	Date.	Items.	Days.	Int.	Date.	Items.	Days.	Int.
149.	Feb. 5, . .	\$ 600	0	0	April 1, . .	\$ 500	55	\$ 9.167
	Apr. 8, . .	420	62	\$ 8.68	Mar. 16, . .	300	39	3.90
		<u>\$ 1,020</u>		<u>\$ 8.68</u>		<u>\$ 800</u>		<u>\$ 13.07</u>
		800						8.68
								<u>4.39</u>
								60

1 day's int. of \$220 = 0.073½

Feb. 5, '78 - 60 d. = Dec. 6, '77. Ans. Dec. 6, '77.

	Dr.				Cr.			
	Date.	Items.	Days.	Int.	Date.	Items.	Days.	Int.
150.	Oct. 19, . .	\$ 173	25	\$ 1.441	Sept. 24, . .	\$ 500	0	0
	Oct. 14, . .	315	20	2.10	Oct. 12, . .	102	18	\$ 0.612
	Oct. 18, . .	230	24	1.84		<u>\$ 602</u>		<u>\$ 0.612</u>
	Nov. 30, . .	81	67	1.809				
		<u>\$ 799</u>		<u>\$ 7.19</u>				
		602		0.612				

1 d.'s int. of \$197 = 0.065½) 6.578

100

Sept. 24 + 100 d. = Jan. 2, '77. Ans. Jan. 2, 1877.

	Dr.				Cr.			
	Date.	Items.	Days.	Int.	Date.	Items.	Days.	Int.
151.	April 6, . .	\$ 340	95	\$ 10.767	Jan. 1, . .	\$ 361	0	
	Feb. 24, . .	582	54	10.476	Apr. 15, . .	4,000	104	\$ 138.667
	May 21, . .	85	140	3.967	Apr. 7, . .	580	96	18.56
	July 29, . .	2,200	209	153.267		<u>\$ 4,941</u>		<u>\$ 157.227</u>
		<u>\$ 3,207</u>		<u>\$ 178.477</u>		3,207		
				157.227		<u>\$ 1,734</u>		

1 d.'s int. of \$1,734 = 0.578) 21.25 = 86.7 d.

Jan. 1 - 37 d. = Nov. 25. Ans. Nov. 25, 1877.

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Ex.	Ans.
1.	\$ 808.00.
2.	\$ 2,505.00.
3.	\$ 703.50.
4.	\$ 1,960.00.

Ex. Ans.

5.	\$ 696.50.
6.	\$ 506.76.
7.	\$ 273.63.
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8.	\$ 2,430.00.

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Ex.	Ans.
9.	\$ 4,840.00.
10.	\$ 106.80.
11.	\$ 109.60.
12.	\$ 47.50.

- Ex. Ans.
 13. \$366.55.
 14. £2,000.
 15. £400 10s.

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16. \$4,340.00.
 17. \$905.25.
 18. \$2,500.00.
 19. $\left\{ \begin{array}{l} \$1,000 \times 1.10\frac{1}{4} = \$1,107.50 \\ \$2,000 \times 1.14 = 2,280.00 \end{array} \right.$
 Ans. \$3,387.50
 20. \$3,000 $\times 1.09\frac{1}{4} = \$3,277.50$.

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21. \$369.90.
 22. $2\frac{27}{108}\%$.
 23. $\left\{ \begin{array}{l} \frac{3 \times 1.02\frac{1}{2}}{1.10} = 2\frac{3}{4}\% \\ 3\frac{1}{2}\% - 2\frac{3}{4}\% = \frac{1}{4}\% \end{array} \right.$
 Ans. Mortgage; $\frac{1}{4}\%$ more.
 24. $\left\{ \begin{array}{l} \frac{\$225 \times 4 \times 100 \times 105\frac{1}{2}}{4\frac{1}{2} \times 100} = \$21,050. \\ \text{Ans. } \$21,050. \end{array} \right.$
 25. $16\frac{2}{3}\%$.
 26. \$94.20.

27. $\left\{ \begin{array}{ll} \text{Prin.} & \$500.00 \text{ from May 10, 1875,} \\ \text{Int.} & 12.25 \text{ to Sept. 16, 1875.} \\ \text{Amt.} & 512.25 \left\{ \begin{array}{l} \text{T. 4 mo. 6 d.} \\ \text{Ratio, } 0.024\frac{1}{2}. \end{array} \right. \\ \text{Payt.} & 140.00 \\ \hline \text{2d prin.} & 372.25 \text{ from Sept. 16, 1875,} \\ \text{Int.} & 48.64 \text{ to July 28, 1877.} \\ \text{Amt.} & 420.89 \left\{ \begin{array}{l} \text{T. 1 y. 10 mo. 12 d.} \\ \text{Ratio, } 0.130\frac{3}{4}. \end{array} \right. \\ \text{Payt.} & 50.00 \\ \hline \text{3d prin.} & 370.89 \text{ from July 28, 1877,} \\ \text{Int.} & 2.596 \text{ to Sept. 3, 1877.} \\ \text{Amt.} & 373.49 \left\{ \begin{array}{l} \text{T. 1 mo. 6 d.} \\ \text{Ratio, } 0.007. \end{array} \right. \\ \hline & \text{Ans. } \$373.49. \end{array} \right.$

- Ex. Ans.
 28. 3%.
 29. 11 mo.
 30. \$600.00.
 31. \$179.25.
 32. \$49.27.
 33. \$400.00.
 34. \$20.46.

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35. \$2.06.
 36. \$99.50.
 37. \$1,308.74.
 38. 3 mo.
 39. \$1,251.13.
 40. 6 T. 772 lb.
 41. \$39.36.
 42. \$437.93.
 43. $\left\{ \begin{array}{l} 500 \times 1.07\frac{1}{2} = \$2,687.50 \\ \text{Ans. } \$2,687.50. \end{array} \right.$
 44. $\left\{ \begin{array}{l} \text{Length, } 2\frac{4}{5} \text{ yds.;} \\ \text{breadth, } \frac{1}{3} \text{ yds.} \end{array} \right.$
 45. $\left\{ \begin{array}{l} \text{Com. } \$13.27. \\ \text{Rem. } \$530.73. \end{array} \right.$
 46. \$43.75.
 47. $3\frac{1}{2}$ mo.
 48. 5% gain.

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49. \$4,365.00.
 50. \$32.19.
 51. $31\frac{1}{2}\%$.
 52. 50 years.
 53. \$124.00.
 54. \$57.50.
 55. \$1.57.
 56. 8 mills; \$16.
 57. \$502.77.

Ex.

58. { Prin. . \$2,500.00 from Sept. 5, 1875,
 { Int. . . 273.33 to July 1, 1877.
 { Amt. . . 2,773.33 { T. 1 y. 9 mo. 26 d.
 { 1st & 2d pt. 550.00 { Ratio, 0.109 $\frac{1}{2}$.
 { 2d prin. 2,223.33 from July 1, 1877,
 { Int. . . 23.72 to Sept. 5, 1877.
 { Amt. . . \$2,247.05 { T. 2 mo. 4 d.
 { Ratio, 0.010 $\frac{3}{4}$.
 { Ans. Ans. \$2,247.05.

59. \$3,754.00.

60. \$400.00.

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61. (Time, 38 d.) \$147.92.
 62. (T. 4 mo. 10 d.) \$146.55.
 63. \$154.31.
 64. \$196.08.

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For answers to drill exercises on Table No. 8, see page 78 of this Key.

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1. $\frac{1}{16}$. 6. $\frac{1}{12}$.
 2. $\frac{1}{8}$. 7. $\frac{1}{2}$.
 3. $\frac{3}{221}$. 8. 7.
 4. $\frac{1}{22}$. 9. 6.
 5. $\frac{2}{65}$.

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10. 850.
 11. 1,750.
 12. 736 $\frac{2}{3}$.
 13. 3,250 tons.
 14. 35 hats.
 15. \$27.30.

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16. \$70. 18. \$750.
 17. \$20. 19. \$7.13.

KEY.

Ex.

Ans.

41. \$933.33.
 42. 18 men.
 43. 54 days.
 44. 9,680 bricks.
 45. 1 T. 328 $\frac{1}{2}$ lb.
 46. 5 T. 816 lb.

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47. { A's, \$1,875;
 { B's, \$1,125.
 48. { B's, 83 $\frac{1}{2}$ T.;
 { S's, 166 $\frac{3}{4}$ T.

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49. { M., \$570.53;
 { N., \$221.87;
 { O., \$316.96;
 { P., \$316.96.
 50. { A's, \$5,625;
 { B's, \$7,500;
 { C's, \$9,375.
 51. \$375; \$500; \$625.
 52. { H. \$500; B. \$506;
 { L. \$480.
 53. { X's, \$332.50;
 { Y's, \$525.

$$\begin{aligned} 1,000 \times 3 &= 3,000 \\ 450 \times 3 &= 1,350 \\ 1,150 \times 6 &= 6,900 \end{aligned}$$

11,250

$$\begin{aligned} 3,000 \times 8 &= 24,000 \\ 3,300 \times 1 &= 3,300 \\ 2,400 \times 2 &= 4,800 \end{aligned}$$

32,100

$$\begin{aligned} &R's \text{ part,} \\ &\frac{75}{255}, \text{ or } \$908.30. \end{aligned}$$

$$\begin{aligned} &P's \text{ part,} \\ &\frac{114}{255}, \text{ or } \$2,591.70. \end{aligned}$$

$$\begin{aligned} &Ans. \left\{ \begin{aligned} &R's, \$908.30. \\ &P's, \$2,591.70. \end{aligned} \right. \end{aligned}$$

Ex.

Ans.

20. 31,680 feet.
 21. 2,500 bushels.
 22. 106 $\frac{2}{3}$ feet.
 23. 15 cents.
 24. 1,076 $\frac{1}{2}$ times.
 25. \$4.66.
 26. 1 lb. 6 $\frac{1}{2}$ oz.
 27. 23 $\frac{1}{2}$ days.
 28. 5 $\frac{1}{2}$ mo.
 29. 3 lb. 4 $\frac{1}{2}$ oz.
 30. 9 $\frac{1}{2}$ yds.
 31. 36 tons.
 32. { 12 : 150 = 1 : x.
 { Ans. 12 $\frac{1}{2}$ min.

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
33. \$30.
 34. 42 days.
 35. { 140 : 180 } = \$30 : x.
 { 25 : 20 } = \$30 : x.
 { Ans. \$30.86.
 36. 26 miles.

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37. 250 tons.
 38. 193 $\frac{1}{2}$ lb.
 39. \$49.25.
 40. \$12 $\frac{2}{3}$ rods.

Page 266.	
Ex.	Ans.
1. { 1, 8, 27, 64, 125, 216, 343, 512, 729, 1,000.	
2. 289.	
3. 784.	
4. $\frac{1}{125}$.	
5. 0.0289.	
6. $3\frac{3}{8}$.	
7. 104.04.	
8. 3,375.	
9. 0.001728.	
10. 14,641.	
11. $\frac{64}{729}$.	
12. 0.03125.	
13. 3.61.	
14. $272\frac{1}{2}$.	
15. 5.76.	
16. 0.0576.	
17. 0.004096.	

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18. 137.	
19. 901.	
20. 93.7.	
21. 8.17.	
22. 7.43.	
23. 0.43.	
24. 234.1.	
25. 2.237.	
26. 60.47.	
27. $\frac{7}{16}$.	
28. $\frac{1}{16}$.	
29. $\frac{2}{3}$, or 0.666...	
30. 0.529...	
31. 0.866...	
32. 1.590...	
33. 2.723...	
34. 2.924...	

Ex.	Ans.
35. 6.082...	
36. 2.321...	
37. 0.883...	
38. 1.414...	
39. 0.3794...	
40. 5.059...	
41. 16.50.	
42. 536.	
43. 94 ft.	
44. 49 men.	
45. 140 feet.	
46. 84.	
47. 112.	
48. 87.63... rods.	
49. { Length, 100; breadth, 50.	
50. 9.704 .. rods.	
51. {  $\frac{1}{2}$ of 1,728 stones must form a square.	
Ans. { Length, 60ft.; width, 45 ft.	
52. 4.5 feet.	

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53. 23.	
54. 46.	
55. 7.4.	
56. 98.	
57. 143.	
58. 24.2.	
59. 43.6.	
60. 9.35.	
61. 9.405...	
62. 7.020...	
63. 0.7067...	
64. 0.928...	
65. $\frac{5}{12}$.	
66. $\frac{9}{15} = \frac{3}{5}$.	
67. 3.5.	

Ex.	Ans.
68. 0.9654...	
69. 0.9546...	
70. 3.986...	
71. 0.6463...	
72. 0.9718...	
73. 1.259...	
74. 332 in.	
75. 6.349... ft.	
76. 41.07... in.	
77. 51.89... in.	
78. { Without cover, \$5.86; with cover, \$7.08.	

For answers to drill exercises 247 and 248, see page 85 of this Key.

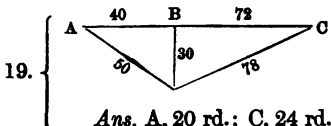
Page 280.	
1. { $4\frac{1}{2}$ sq. ft. = 4 sq. ft. 24 sq. in.	
2. $103\frac{1}{2}$ sq. ft.	
3. 180 sq. ft.	
4. 10,624 sq. ft.	
5. $19.52\frac{7}{16}$ A.	

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6. 75.3984 ft.	
7. 25.1328 ft.	
8. 31.8309... ft.	
9. 18.3478... sq. ft.	
10. 346.3614... sq. ft.	
11. 44.8369... rods.	
12. 12 planks.	
13. { 100.5312 ft. 268 persons.	

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14. 30 ft.	
15. 19.5 ft.	
16. 18.330... ft.	
17. 6,600 ft.	

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Ex. Ans.
18. 82.683... ft.



20. { 276.099... rods, or 276.1...,
if roots are found to ten-
thousandths; thus,
 $\sqrt{40^2 + 60^2} = 72.1110...$
 $\sqrt{60^2 + 57^2} = 82.7586...$
 $\sqrt{57^2 + 36^2} = 67.4166...$
 $\sqrt{36^2 + 40^2} = 53.8144...$
276.1006...

21. 21.213... ft.
22. 23.043... ft.
23. 39 inches.
24. { 8.660... ft.;
43.3... sq. ft.
25. 24 ft. ; 240 sq. ft.

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26. 448 cu. in.
27. 216.5 cu. ft.
28. 907.5 cu. ft.

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29. { $\sqrt{12 \times 108} = 36$
 $(12 + 108 + 36) 6 = 936$
Ans. 936 cu. in.

30. { $\frac{(81 + 108 + 144) 8 \times 4}{3 \times 5} = 701.4...$
 $\frac{701.4 \times 4}{5} = 568.32$
Ans. { 701.4 bu. shelled;
568.32 bu. unshelled.

31. 40 sq. yd. 8 sq. ft.

Ex. Ans.

32. 720 sq. ft.
33. 220 ft.
34. { $\frac{11 \times 11 \times 3.1416 \times 14}{2 \times 2 \times 231} = 5.7596$
Ans. 5.7596 gal.
35. 14.1372 sq. ft.
36. 18 ft.; 1,060.29 cu. ft.
37. 51.051 sq. yd.
38. { Area of top, . . 176.715
Area of bottom, 113.0976
Mean pro. . . 141.372
 $\frac{431.1846 \times 6 \times 1728}{2 \times 231} = 6,450.9696$
Ans. 6,450.9696 gal.
39. 3.1416 sq. ft.
40. \$ 42.98.
41. 113.0976 cu. ft.
42. 144,109,433.16... sq. m.

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43. 34 $\frac{1}{2}$ yards.

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44. 1,848 ft.
45. 19.63495 rods.
46. 125 gallons.
47. \$ 0.93.
48. \$ 162.00.
49. \$ 4.86.
50. 9.071 in.

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51. 18 $\frac{1}{4}$ oz.
52. 3,188.046... lb.
53. { 14.68... in.;
6.349... in.
54. { $2160^3 : 7912^3 = 1 : x$
Ans. 49.14... bodies.

- Ex. Ans.
 55. { $1 : 1000 = 7912^3 : x^3$
 Ans. 79,120 miles.
 56. { $2 : 1 = 12^3 : x^3$
 Ans. 9.524... in.
 57. 4.32 tons; 6.86 tons.

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58. $11\frac{7}{8}$.
 59. 0.7589...
 60. $712\frac{1}{2}$; 1,187 $\frac{1}{2}$.
 61. $22\frac{1}{2}$; 5; $17\frac{1}{2}$.
 62. 10,000 lb.
 63. S's, \$389.50; L's, \$1,046.00.
 64. 6,436,343; 884,736.
 65. { 961; 39 rem.
 31 on each side.
 66. 3,233.32... ft.
 67. $10\frac{1}{2}$ ft.
 68. 20 ft.

$$69. \left\{ \begin{array}{l} \sqrt{\frac{15.708 \times 160}{3.1416}} = 28.2842... \\ 28.2842 \times 2 \times 3.1416 = 177.71528... \\ 31.2842 \times 2 \times 3.1416 = 196.56488... \\ \text{Sum, } 374.28016... \\ \text{Ans. } 374.28... \text{ rods.} \end{array} \right.$$

$$70. \left\{ \begin{array}{l} \frac{5 \times 231}{25 \times 3.1416} = 14\frac{1}{4} \\ \text{Ans. } 14\frac{1}{4} \text{ in.} \end{array} \right.$$

$$71. \left\{ \begin{array}{l} \sqrt{7^2 + (\frac{3}{8})^2} = 11\frac{3}{8} \\ \frac{14 \times 3.1416 \times 11\frac{3}{8}}{2} = 256.56... \\ \text{Ans. } 256.56... \text{ sq. ft.} \end{array} \right.$$

$$72. \frac{1}{2} \text{ hour.}$$

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73. $227\frac{1}{2}$ lb. 77. 1,900.
 74. $16\frac{1}{3}$. 78. 32,249... ft.
 75. $30\frac{5}{12}$. 79. \$5,274.84.
 76. 375 barrels. 80. \$6,080.00.

- Ex. Ans. Ex. Ans.
 81. $\frac{7}{8}$. 84. 2 h. 24 m.
 82. \$95,388.75. 85. 120 shares.
 83. $441\frac{1}{4}\%$.

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86. 4 dozen.
 87. { True discount, \$12.04
 Bank discount, 12.658
 \$0.618
 Ans. \$0.62.
 88. \$803.19.
 89. Face of note, \$303.19.
 90. \$1,593.00.
 91. { B's, $\frac{\$1355.75 \times 227}{399} = \771.32 .
 H's, $\frac{\$1355.75 \times 172}{399} = \$1,584.43$.
 92. { $\sqrt{\frac{89111000}{160}} = 746.286$.
 Ans. 746.286 ft.

93. 20%.

Due.	Item.	Time.	Int.
1877.			
Sept. 17, . .	\$200	31	\$2.066
Aug. 17, . .	500		
Sept. 17, . .	800	31	3.10
94. { 1 day's int. of 1,000 = 0.333			5.166
			16
	Aug. 17 + 16 d. = Sept. 2.		
	Ans. Sept. 2, 1877.		

$$95. 131^\circ 20' 38'' \text{ W.}$$

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96. \$41.50.
 97. 40,882 $\frac{1}{2}$ bricks.
 98. 6.2832 in.
 99. 1 h. 29 m. 18 $\frac{1}{2}$ s. P.M.
 100. { A's loss, \$13,750;
 B's loss, \$11,000;
 C's loss, \$8,250.
 C pays A, \$8,250.
 B pays A, \$3,000.

- Ex. Ans.
101. \$ 12 gain.
102. \$ 2.59 $\frac{1}{2}$.

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$$103. \left\{ \begin{array}{l} \sqrt{12.75} = 3.5707 \\ (3.5707 \times 4 \times 16\frac{1}{2}) + (7 \times 4) = 263.6662 \text{ (ft.)} \\ 263.6662 \times 7 \times 5 = 9228.41. \\ \text{Ans. \$ 92.28.} \end{array} \right.$$

104. 94.0032 gal.
105. \$ 5.07.
106. Gained \$ 0.71.
107. 19 T. 1,375 lb.
108. $\left\{ \begin{array}{l} \text{Length, 6.697... ft.} \\ \text{Diameter, 5.640... in.} \end{array} \right.$
109. $\left\{ \begin{array}{l} 6 : 138 = 480 : x \\ \text{Ans. 2 miles 480 feet.} \end{array} \right.$

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1. 3,564.
2. 263,736.
3. 579,942.
4. 368,373,159.
5. 69,999,993.
6. 244,510.
7. 3,558,220.
8. 54,931,835,204.
9. 26,496; 13,248.
10. 330,399; 195,792.
11. 231,660; 308,880.
12. $\left\{ \begin{array}{l} 2,772,605; \\ 7,561,650. \end{array} \right.$

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13. 621. 21. 11,025.
14. 616. 22. 30 $\frac{1}{4}$.
15. 1,209. 23. 72 $\frac{1}{4}$.
16. 2,025. 24. 132 $\frac{1}{4}$.
17. 3,024. 25. 182 $\frac{1}{4}$.
18. 7,221. 26. 9,900 $\frac{1}{4}$.
19. 3,025. 27. 272 $\frac{1}{4}$.
20. 7,225. 28. 39 $\frac{1}{16}$.

- Ex. Ans. Ex. Ans.
29. 68 $\frac{1}{16}$. 32. 2,525 $\frac{1}{16}$.
30. 52 $\frac{9}{16}$. 33. 3,751 $\frac{9}{16}$.
31. 915 $\frac{1}{16}$.

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34. 830 links.
35. 0.45 ch.
36. 11.56 ch.
37. 72.2 rd.
38. 129 rd. 1.32 ft.
39. 93 rd. 14.52 ft.
40. 150 acres.
41. 108 acres.
42. 7.0448 acres.
43. 111.32854 acres.

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44. \$ 80.15. 46. \$ 250.82.
45. \$ 42.59.

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47. $\left\{ \begin{array}{l} 18 \times 100 = 20 \\ 20 \times 120 = 24 \\ \text{Ans. 24\%} \end{array} \right.$
48. 3 more.
49. $\left\{ \begin{array}{l} 16\frac{2}{3} \text{ days; 50 miles east of the} \\ \text{point.} \\ 20 \times 100 = 50 \\ \frac{2}{3} \times 50 = \frac{1}{3} = 50\% \\ \text{Ans. 50\%} \end{array} \right.$
51. \$ 1,800.00.
52. $\left\{ \begin{array}{l} 5 \times 30 = 150 \\ 150 \div 25 = 6 \\ \text{Ans. 6 bushels.} \end{array} \right.$
53. $\left\{ \begin{array}{l} 34.10 \times 125 = 38\frac{1}{4} \\ 100 \times 1.10 \\ 38\frac{1}{4} - 31 = 7\frac{1}{4} \\ \text{Ans. 7\frac{1}{4} gal.} \end{array} \right.$
54. 28%.

- Ex. *Ans.*
 55. $\left\{ \begin{array}{l} \frac{\$9 \times 100 \times 3}{75} = \$36, \text{ cost of the whole.} \\ 36 \times 1.08\frac{1}{2} - 9 = 30 \\ \text{Ans. } \$30. \end{array} \right.$
 56. $\left\{ \begin{array}{l} \frac{\$24 \times 2 \times 100}{120} = \$40 \\ \frac{\$24 \times 2 \times 100}{80} = \$60 \\ 100 - 96 = 4 \\ \text{Ans. } \$4.00 \text{ gain.} \end{array} \right.$
 57. $\left\{ \begin{array}{l} \text{If } \frac{1}{2} \text{ of 1st part equals } \frac{2}{3} \text{ of} \\ \text{2d part, all of the 1st part} \\ \text{must equal } 1\frac{1}{2} \text{ of 2d part.} \\ \frac{3}{2} + \frac{1}{3} = 1\frac{2}{3} \\ \frac{2 \times 3}{1 \times 3} = 12 \quad \frac{2 \times 10}{1 \times 3} = 40 \\ \text{Ans. 12 and 40.} \end{array} \right.$
 58. $23\frac{1}{2}$ cu. yd.
 59. $12\frac{1}{2}\%$.

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60. $\left\{ \begin{array}{l} \text{Avails of note, } \$108.84. \\ \text{Ans. } \$181.40. \\ \text{Prin. } \$1,000.00 \\ \text{Int. } 80.00 \text{ T. 1 y. (0.08).} \\ \text{Amt. } 1,080.00 \\ \text{1st pyt. } 200.00 \\ \text{2d prin. } 880.00 \\ \text{Int. } 70.40 \text{ T. 1 y. (0.08).} \\ \text{Amt. } 950.40 \\ \text{2d pyt. } 200.00 \\ \text{3d prin. } 750.40 \\ \text{Int. } 60.032 \text{ T. 1 y. (0.08).} \\ \text{Amt. } 810.432 \\ \text{3d pyt. } 200.000 \\ \text{4th prin. } 610.432 \\ \text{Int. } 4.748 \left\{ \begin{array}{l} \text{T. 1 m. 5 d.} \\ \text{R. 0.007}\frac{1}{2}. \end{array} \right. \\ \text{Ans. } \$615.18 \end{array} \right.$

- Ex. *Ans.*
 62. $\left\{ \begin{array}{l} \frac{4.12 \times 110}{1.03 \times 100} = 4.40 \\ \text{Ans. } \$4.40. \end{array} \right.$
 63. $\left\{ \begin{array}{l} \text{Area of large end, } 7.0686 \\ \text{Area of small end, } 4.90875 \\ \text{Mean proportional, } 5.8905 \\ 17.86785 \\ 17.86785 \times 6 \times 62\frac{1}{2} \times 0.06 = 4,020.26... \\ \text{Ans. 2 T. 20.26... lb.} \end{array} \right.$
 64. $\left\{ \begin{array}{l} 40^2 \times 3.1416 = 5,026.56 \\ (\frac{7}{2})^2 \times 3.1416 = 4,417.875 \\ 608.685 \\ \text{Ans. 608.685 sq. ft.} \end{array} \right.$
 65. $\left\{ \begin{array}{l} \sqrt{3^2 + 33^2} = 33.136... \\ \text{Ans. 33.136... miles.} \end{array} \right.$
 66. \$825.00.
 67. $\left\{ \begin{array}{l} \frac{\$87.50 \times 85}{100} = \text{cost.} \\ \frac{\$87.50 \times 34\frac{1}{2}}{100} = \text{gain.} \\ \frac{\$87.50 \times 34\frac{1}{2} \times 100}{100 \times 87.50 \times 85} = 40\frac{1}{4}\%. \\ \text{Ans. } 40\frac{1}{4}\%. \end{array} \right.$
 68. $\left\{ \begin{array}{l} \sqrt{\frac{9^2}{2}} = 6.3639... \end{array} \right.$
 69. 180 feet.
 70. $\left\{ \begin{array}{l} \text{Prin. } \$481.60 \text{ from June 3, '75,} \\ \text{Int. } 69.59 \text{ to Nov. 4, '77.} \\ \text{Amt. } 551.19 \left\{ \begin{array}{l} \text{T. 2 y. 4 mo. 27 d.} \\ \text{Ratio, 0.144}\frac{1}{2}. \end{array} \right. \\ \text{1st pyt. } 180.60 \\ \text{2d prin. } 370.59 \\ \text{Int. } 11.056 \text{ to May 3, '78.} \\ \text{Amt. } 381.646 \left\{ \begin{array}{l} \text{T. 5 mo. 29 d.} \\ \text{Ratio, 0.022}\frac{1}{2}. \end{array} \right. \\ \text{2d pyt. } 240.80 \\ \text{3d prin. } 140.846 \\ \text{Int. } 3.145 \text{ to Sept. 17, '78.} \\ \text{Amt. } \$143.99 \left\{ \begin{array}{l} \text{T. 4 mo. 14 d.} \\ \text{Ratio, 0.022}\frac{1}{2}. \end{array} \right. \\ 2,889.60 - 143.99 = 2,745.61. \\ \text{Ans. } \$2,745.61. \end{array} \right.$

ANSWERS TO DRILL EXERCISES.

SIMPLE NUMBERS (page 59).

Examples.	1	2	3	4	5
1.	8,478	8,687	51,952	24,794	113,839
2.	3,811	4,390	91,048	20,466	153,147
3.	5,674	6,364	35,090	22,485	96,700
4.	2,591	2,678	76,462	18,766	138,778
5.	8,985	9,373	27,025	25,513	89,258
6.	8,463	9,325	94,736	25,423	156,578
7.	5,514	6,157	63,264	22,231	125,312
8.	7,016	7,404	49,803	23,494	111,566
9.	2,930	3,420	39,803	19,549	101,925
10.	9,595	10,333	85,078	26,451	147,052
11.	2,337	2,522	101,898	18,618	163,525
12.	6,626	7,252	23,474	23,389	85,230
13.	5,605	6,067	69,419	22,171	131,611
14.	9,556	10,200	92,084	26,313	153,885
15.	5,087	5,709	50,921	21,774	113,090
16.	3,309	4,250	77,626	20,329	139,262
17.	6,221	6,979	66,308	23,114	128,321
18.	2,105	2,404	31,443	18,474	93,190
19.	10,611	10,712	50,642	26,816	113,090
20.	5,650	6,377	34,977	22,476	96,837
21.	8,182	8,609	104,072	24,740	166,038
22.	2,838	3,090	84,335	19,177	145,893
23.	4,663	5,037	56,407	21,171	118,650
24.	6,926	7,211	31,054	23,317	93,084
25.	9,021	9,918	94,856	25,985	157,173

SIMPLE NUMBERS (page 59).

Examples.	6	7	8	9	10	11
1.	75,985	378	621	946	1,538	7,389
2.	115,262	3,737	6,144	8,814	14,728	2,329
3.	58,860	2,887	5,292	6,508	10,528	5,125
4.	100,905	3,193	5,695	8,559	14,212	663
5.	51,437	4,401	6,123	7,563	11,824	7,171
6.	118,715	303	488	770	1,282	7,473
7.	87,425	3,832	5,151	7,427	11,213	4,136
8.	73,695	355	646	918	1,590	6,192
9.	64,093	4,228	6,008	9,497	15,062	1,349
10.	109,209	1,363	3,006	4,585	9,307	8,321
11.	125,660	3,977	6,169	9,462	16,076	1,779
12.	47,406	2,751	4,431	5,814	9,910	5,769
13.	93,774	2,900	5,907	8,677	13,118	3,889
14.	116,037	2,924	4,958	7,133	12,343	8,633
15.	75,194	331	550	841	1,560	3,476
16.	101,380	3,164	6,104	9,209	15,449	2,750
17.	90,495	2,503	4,511	7,764	12,882	4,852
18.	55,299					1,333
19.	75,079					8,711
20.	58,975					4,623
21.	128,208					6,911
22.	108,019					2,427
23.	80,823					2,835
24.	55,229					5,552
25.	119,279					7,112

SIMPLE NUMBERS (page 59).

Examples.	12	13	14	15	16
1.	2,591	38,047	5,036	33,011	3,072
2.	3,129	79,898	689	80,587	4,344
3.	7,835	11,753	3,244	14,997	1,410
4.	6,688	61,083	5,217	66,300	5,646
5.	4,444	8,650	3,099	5,551	5,148
6.	4,521	75,000	2,501	72,499	2,802
7.	6,433	43,564	2,299	45,863	4,038
8.	4,147	33,621	1,997	31,624	2,328
9.	7,480	21,016	5,961	26,977	4,482
10.	6,160	61,396	1,946	59,450	3,594
11.	8,868	81,414	7,076	88,490	1,512
12.	859	13,443	4,570	8,873	2,286
13.	6,818	49,445	2,656	52,101	4,902
14.	1,400	78,080	6,944	71,136	2,556
15.	3,631	37,454	6	37,460	4,764
16.	5,605	60,471	3,572	64,043	1,566
17.	2,090	54,085	2,549	51,536	3,828
18.	8,397	11,963	7,019	18,982	2,232
19.	6,076	28,371	3,391	24,980	5,514
20.	3,253	21,011	1,071	19,940	2,910
21.	4,966	85,090	2,020	83,070	3,546
22.	9,075	62,684	6,762	69,446	1,098
23.	5,582	40,142	2,345	42,487	5,208
24.	3,310	17,180	2,548	14,632	3,930
25.	3,254	77,528	3,878	73,650	5,652

SIMPLE NUMBERS (page 59).

Examples.	17	18	19	20	21
1.	55,307	2,192	25,785	33,280	4,045,312
2.	21,371	4,904	33,678	24,616	2,210,372
3.	37,520	6,152	77,436	18,565	1,259,600
4.	11,228	1,064	61,389	48,286	1,509,364
5.	56,203	3,888	44,370	84,084	6,888,882
6.	55,580	7,344	48,951	26,152	3,707,980
7.	33,663	5,400	63,972	21,536	3,236,457
8.	46,060	3,488	41,247	18,624	2,553,040
9.	14,672	4,616	72,513	64,989	1,565,712
10.	62,440	6,512	62,766	45,524	5,343,080
11.	14,217	1,912	81,963	13,608	511,812
12.-	43,050	5,768	14,220	36,195	2,343,150
13.	32,942	4,352	66,258	66,994	3,844,802
14.	63,413	5,720	19,035	30,246	3,859,134
15.	29,890	5,160	38,484	18,262	3,390,380
16.	21,077	7,824	59,247	9,657	785,871
17.	38,430	6,808	26,469	59,334	3,502,620
18.	11,935	2,616	78,516	10,416	634,260
19.	67,410	1,304	56,151	56,978	8,849,970
20.	35,756	6,272	36,333	27,645	2,477,380
21.	52,514	4,128	49,338	52,599	4,433,682
22.	18,270	2,376	84,348	8,235	477,630
23.	25,921	3,728	54,432	79,856	3,214,204
24.	43,449	2,792	32,931	41,920	4,065,585
25.	56,378	7,376	37,584	23,550	7,586,868

SIMPLE NUMBERS (page 59).

Examples.	22	23	24	25
1.	2,164,874	785,010	11,209,888	323,245,712
2.	1,871,489	2,293,846	51,271,320	255,352,920
3.	4,121,840	6,616,476	15,654,533	109,113,520
4.	213,332	907,193	9,031,232	108,918,016
5.	3,902,094	2,395,980	6,599,880	109,033,820
6.	7,288,920	4,993,002	73,843,002	638,685,660
7.	3,246,075	4,797,900	34,203,600	243,681,648
8.	2,868,880	1,998,188	16,656,944	251,382,320
9.	1,209,392	4,648,889	16,775,121	60,937,008
10.	7,260,880	5,676,836	55,653,180	609,860,400
11.	485,409	2,176,573	21,634,519	183,848,151
12.	4,434,150	1,139,180	10,831,583	92,391,450
13.	2,560,064	4,004,928	30,903,008	267,333,742
14.	6,477,185	1,512,225	57,339,425	726,486,505
15.	2,754,150	2,758,020	26,915,850	178,187,100
16.	2,944,758	6,438,174	65,578,812	201,899,594
17.	4,671,990	2,502,791	48,529,126	313,072,740
18.	557,535	2,852,748	6,764,649	35,271,335
19.	1,569,690	1,016,957	5,641,430	333,294,300
20.	4,004,672	3,165,008	19,637,632	127,945,184
21.	3,871,032	2,828,712	46,735,152	679,471,144
22.	775,170	2,783,484	21,400,632	188,066,160
23.	1,725,598	2,818,368	21,524,540	171,041,570
24.	2,166,243	1,276,991	7,272,811	129,347,673
25.	7,425,788	3,850,272	75,331,088	658,044,016

SIMPLE NUMBERS (page 59).

Examples.	26	27	28	29	30	31
1.	7,324	11,004	3,891	233,636	72,244	18,900
2.	2,295	6,906	8,527	530,586	52,545	20,778
3.	5,046	14,498	6,709	750,181	106,375	24,773
4.	617	9,233	9,759	65,362	65,123	19,298
5.	7,073	13,331	3,417	473,392	91,016	26,885
6.	7,417	13,830	3,897	839,397	97,578	28,147
7.	4,104	11,919	6,822	625,678	90,443	26,072
8.	6,144	11,211	5,336	398,668	79,196	19,839
9.	1,262	10,323	9,461	549,081	81,071	23,970
10.	8,245	16,109	2,785	747,258	115,010	30,838
11.	1,725	11,151	10,021	148,957	86,715	16,287
12.	5,674	8,070	5,773	707,419	54,587	19,471
13.	3,807	12,341	6,781	488,281	90,940	26,222
14.	8,562	11,463	2,819	636,235	76,279	23,299
15.	3,453	8,695	7,240	604,560	64,343	23,581
16.	2,713	10,311	9,032	912,902	77,576	22,962
17.	4,759	8,644	6,176	795,676	62,425	24,172
18.	1,305	10,474	10,227	306,967	82,311	17,746
19.	8,649	16,625	1,755	128,716	108,833	26,852
20.	4,566	9,444	6,711	760,520	68,432	22,619
21.	6,822	13,059	4,211	426,460	92,480	24,570
22.	2,382	12,096	9,511	225,538	92,715	17,079
23.	2,743	10,153	7,733	420,742	73,864	23,557
24.	5,488	10,172	5,442	328,859	68,957	20,255
25.	7,087	12,250	3,308	842,140	88,186	31,792

SIMPLE NUMBERS (pages 59, 61).

Examples.	32	33	34	43	44
1.	37,773	8,139	4,803	117,251½	93,801½
2.	79,285	3,164	6,618	185,875	148,700
3.	10,984	4,826	2,352	155,021½	124,017
4.	60,950	2,412	8,607	200,164½	160,131½
5.	8,164	8,401	8,016	97,425	77,940
6.	74,082	7,489	4,371	239,200	191,360
7.	42,889	4,807	6,153	71,251	57,000½
8.	33,185	6,532	3,636	125,094	100,075½
9.	20,439	2,266	6,984	168,850	135,080
10.	60,582	8,705	5,619	183,225	146,580
11.	81,175	2,044	2,430	121,575	97,260
12.	12,722	5,810	3,714	210,003½	168,003
13.	48,901	4,979	7,599	142,517	114,013½
14.	77,365	8,770	4,047	240,600	192,480
15.	36,809	4,419	7,215	108,900	87,120
16.	59,493	2,294	2,460	175,210½	140,168½
17.	53,234	5,277	6,021	164,925	131,940
18.	11,636	1,750	3,432	200,218½	160,175
19.	28,208	10,386	8,457	160,751½	128,601½
20.	20,227	4,809	4,536	87,523	70,018½
21.	84,574	7,577	5,586	200,191½	160,153
22.	62,387	2,496	1,782	117,251½	93,801½
23.	39,676	4,105	8,088	195,625	156,500
24.	16,831	6,513	6,087	236,501½	189,201½
25.	76,606	8,074	8,553	116,325	93,060

SIMPLE NUMBERS (page 61).

Examples.	45	46	47	48	49
1.	1,341,058 $\frac{1}{2}$	1,149,478 $\frac{1}{2}$	58,625 $\frac{1}{2}$	52,111 $\frac{1}{2}$	505 $\frac{1}{2}$
2.	1,088,463 $\frac{1}{2}$	932,968 $\frac{1}{2}$	92,937 $\frac{1}{2}$	82,611 $\frac{1}{2}$	450 $\frac{1}{2}$
3.	775,730	664,911 $\frac{1}{2}$	77,510 $\frac{1}{2}$	68,898 $\frac{1}{2}$	670 $\frac{1}{2}$
4.	1,303,410 $\frac{1}{2}$	1,117,209	100,082 $\frac{1}{2}$	88,962 $\frac{1}{2}$	604 $\frac{1}{2}$
5.	1,511,386 $\frac{1}{2}$	1,295,474	48,712 $\frac{1}{2}$	43,300	257 $\frac{1}{2}$
6.	963,771 $\frac{1}{2}$	826,090	119,600	106,311 $\frac{1}{2}$	375 $\frac{1}{2}$
7.	650,957 $\frac{1}{2}$	557,963 $\frac{1}{2}$	35,625 $\frac{1}{2}$	31,667 $\frac{1}{2}$	232 $\frac{1}{2}$
8.	474,895	407,052 $\frac{1}{2}$	62,547	55,597 $\frac{1}{2}$	467 $\frac{1}{2}$
9.	1,078,476	924,408	84,425	75,044 $\frac{1}{2}$	763 $\frac{1}{2}$
10.	963,843 $\frac{1}{2}$	826,151 $\frac{1}{2}$	91,612 $\frac{1}{2}$	81,433 $\frac{1}{2}$	507 $\frac{1}{2}$
11.	1,260,141 $\frac{1}{2}$	1,080,121 $\frac{1}{2}$	60,787 $\frac{1}{2}$	54,033 $\frac{1}{2}$	708 $\frac{1}{2}$
12.	612,013 $\frac{1}{2}$	524,583 $\frac{1}{2}$	105,001 $\frac{1}{2}$	93,335	344 $\frac{1}{2}$
13.	820,268	703,086 $\frac{1}{2}$	71,258 $\frac{1}{2}$	63,340 $\frac{1}{2}$	590 $\frac{1}{2}$
14.	1,571,762	1,347,224 $\frac{1}{2}$	120,300	106,933 $\frac{1}{2}$	308 $\frac{1}{2}$
15.	697,843 $\frac{1}{2}$	598,151 $\frac{1}{2}$	54,450	48,400	679 $\frac{1}{2}$
16.	1,068,390 $\frac{1}{2}$	915,763 $\frac{1}{2}$	87,605 $\frac{1}{2}$	77,871 $\frac{1}{2}$	364 $\frac{1}{2}$
17.	266,451	228,386 $\frac{1}{2}$	82,462 $\frac{1}{2}$	73,300	456 $\frac{1}{2}$
18.	1,236,848 $\frac{1}{2}$	1,060,155 $\frac{1}{2}$	100,109 $\frac{1}{2}$	88,986 $\frac{1}{2}$	91 $\frac{1}{2}$
19.	1,075,118 $\frac{1}{2}$	921,530 $\frac{1}{2}$	80,375 $\frac{1}{2}$	71,445 $\frac{1}{2}$	700 $\frac{1}{2}$
20.	472,511 $\frac{1}{2}$	405,009 $\frac{1}{2}$	43,761 $\frac{1}{2}$	38,899 $\frac{1}{2}$	544 $\frac{1}{2}$
21.	884,456 $\frac{1}{2}$	758,105 $\frac{1}{2}$	100,095 $\frac{1}{2}$	88,973 $\frac{1}{2}$	600 $\frac{1}{2}$
22.	590,114 $\frac{1}{2}$	505,812 $\frac{1}{2}$	58,625 $\frac{1}{2}$	52,111 $\frac{1}{2}$	713 $\frac{1}{2}$
23.	1,231,744 $\frac{1}{2}$	1,055,781 $\frac{1}{2}$	97,812 $\frac{1}{2}$	86,944 $\frac{1}{2}$	359
24.	1,013,957 $\frac{1}{2}$	869,106 $\frac{1}{2}$	118,250 $\frac{1}{2}$	105,111 $\frac{1}{2}$	330
25.	1,234,775 $\frac{1}{2}$	1,058,379	58,162 $\frac{1}{2}$	51,700	567 $\frac{1}{2}$

SIMPLE NUMBERS (page 61).*

Examples.	50 <i>Rem.</i>	51 <i>Rem.</i>	52 <i>Rem.</i>	53 <i>Rem.</i>
1.	404; 8	29,312; 15	26,055; 17	298,013; 1
2.	360; 6	46,468; 12	41,305; 10	241,880; 21
3.	536; 9	38,755; 5	34,449; 3	172,384; 12
4.	483; 5	50,041; 3	44,481; 1	289,646; 21
5.	205; 12	24,356; 4	21,650	335,863; 17
6.	300; 3	59,800	53,155; 10	214,171; 13
7.	186	17,812; 12	15,833; 10	144,657; 7
8.	373; 13	31,273; 8	27,798; 12	105,532; 6
9.	610; 10	42,212; 8	37,522; 4	239,661; 9
10.	405; 10	45,806; 4	40,716; 12	214,187; 13
11.	567; 2	30,393; 12	27,016; 12	280,031; 12
12.	275; 5	52,500; 15	46,667; 9	136,003; 2
13.	472; 2	35,629; 4	31,670; 8	182,281; 21
14.	247; 1	60,150	53,466; 12	349,280; 12
15.	543; 9	27,225	24,200	155,076; 11
16.	291; 5	43,802; 11	38,935; 13	237,420; 2
17.	365; 5	41,231; 4	36,650	59,211; 9
18.	72; 14	50,054; 11	44,493; 1	274,855; 4
19.	560; 6	40,187; 15	35,722; 11	238,915; 8
20.	435; 5	21,880; 12	19,449; 10	105,002; 14
21.	480; 9	50,047; 13	44,486; 17	196,545; 24
22.	570; 10	29,312; 15	26,055; 17	131,136; 15
23.	287; 3	48,906; 4	43,472; 4	273,721; 1
24.	264	59,125; 7	52,555; 17	225,323; 24
25.	453; 10	29,081; 4	25,850	274,394; 15

* For the sake of being read more easily, the answers to examples in Exercises 50 to 60 are put in their simplest form, with remainders merely.

SIMPLE NUMBERS (page 61).

Examples.	54 <i>Rem.</i>	55 <i>Rem.</i>	56 <i>Rem.</i>	57 <i>Rem.</i>
1.	134 ; 38	10,422 ; 17	12,417 ; 136	77 ; 1,771
2.	79 ; 34	10,933 ; 56	13,807 ; 70	137 ; 2,878
3.	108 ; 57	8,379 ; 39	5,574 ; 90	77 ; 312
4.	129 ; 26	14,297 ; 27	13,210 ; 143	110 ; 3,159
5.	64 ; 15	8,118 ; 36	12,490 ; 578	126 ; 738
6.	70 ; 23	14,950	6,061 ; 436	212 ; 2,164
7.	35 ; 60	3,653 ; 70	10,642 ; 132	102 ; 424
8.	67 ; 43	6,028 ; 52	9,859 ; 119	89 ; 1,620
9.	169 ; 34	12,507 ; 22	10,190 ; 206	73 ; 6,720
10.	80 ; 5	9,643 ; 32	11,826 ; 148	120 ; 2,700
11.	146 ; 39	8,384 ; 28	20,162 ; 99	57 ; 1,401
12.	87 ; 41	17,872 ; 31	5,329 ; 402	203 ; 1,625
13.	108 ; 62	8,770 ; 18	6,441 ; 684	80 ; 3,508
14.	69 ; 49	18,158 ; 26	10,902 ; 342	259 ; 2,546
15.	166 ; 20	8,889 ; 39	5,260 ; 103	53 ; 3,438
16.	52 ; 2	8,343 ; 31	18,473 ; 211	160 ; 1,643
17.	69 ; 29	8,350 ; 50	2,728 ; 98	120 ; 2,100
18.	17 ; 23	12,712 ; 19	11,835 ; 544	732 ; 67
19.	147 ; 27	11,280 ; 47	16,330 ; 363	76 ; 4,151
20.	94 ; 44	5,073 ; 55	3,841 ; 410	53 ; 4,002
21.	96 ; 9	10,676 ; 65	9,165 ; 204	111 ; 566
22.	127 ; 51	7,000 ; 7	7,285 ; 177	54 ; 6,767
23.	73 ; 1	13,262 ; 42	7,845 ; 478	181 ; 2,752
24.	86 ; 4	20,565 ; 17	21,883 ; 271	238 ; 3,527
25.	93 ; 16	6,373 ; 71	12,621 ; 126	68 ; 2,560

SIMPLE NUMBERS (page 61).

Examples.	58 <small>Rem.</small>	59 <small>Rem.</small>	60 <small>Rem.</small>	61
1.	1,326 ; 184	586 ; 207	1,915 ; 3,352	53,633
2.	1,208 ; 333	929 ; 300	1,554 ; 3,981	52,819
3.	578 ; 2,058	775 ; 85	1,108 ; 780	55,830
4.	1,078 ; 4,963	1,000 ; 659	1,862 ; 63	54,770
5.	2,937 ; 1,799	487 ; 100	2,158 ; 4,718	50,733
6.	1,284 ; 778	1,196	1,376 ; 3,430	52,393
7.	1,399 ; 2,536	356 ; 204	929 ; 3,946	50,107
8.	508 ; 2,538	625 ; 376	678 ; 1,770	52,852
9.	706 ; 3,896	844 ; 200	1,540 ; 2,856	56,721
10.	950 ; 2,312	916 ; 100	1,376 ; 3,862	53,522
11.	888 ; 6,633	607 ; 700	1,800 ; 849	55,812
12.	889 ; 513	1,050 ; 15	874 ; 1,283	51,738
13.	694 ; 6,700	712 ; 468	1,171 ; 3,408	54,783
14.	2,544 ; 2,508	1,203	2,245 ; 1,572	51,496
15.	513 ; 4,061	544 ; 400	996 ; 3,863	55,871
16.	1,466 ; 3,922	876 ; 43	1,526 ; 1,142	51,673
17.	291 ; 4,026	824 ; 500	380 ; 2,706	53,017
18.	6,783 ; 487	1,001 ; 75	1,766 ; 3,889	48,656
19.	767 ; 3,311	803 ; 607	1,535 ; 3,713	55,730
20.	434 ; 1,048	437 ; 492	675 ; 68	54,209
21.	736 ; 915	1,000 ; 765	1,263 ; 2,139	54,735
22.	413 ; 5,407	586 ; 207	843 ; 87	55,985
23.	1,715 ; 2,248	978 ; 100	1,759 ; 6,268	52,181
24.	1,536 ; 1,185	1,182 ; 407	1,448 ; 2,145	51,156
25.	1,088 ; 4,813	581 ; 500	1,763 ; 4,053	54,337

SIMPLE NUMBERS (page 61).

Examples.	62	63	64	65
1.	541,246	7,577,345	3,356,282	2,845,934,476
2.	814,925	5,787,281	904,219	4,019,361,000
3.	694,521	4,034,295	1,546,470	4,991,064,165
4.	874,035	7,019,804	186,127	5,804,777,750
5.	459,039	8,678,618	5,171,318	1,203,003,900
6.	1,027,799	4,825,830	3,785,370	4,308,470,400
7.	353,717	3,620,742	1,055,706	795,161,160
8.	571,834	2,348,994	2,154,390	2,806,108,608
9.	750,727	5,795,456	283,144	6,186,664,000
10.	805,028	5,050,162	1,545,938	4,459,696,500
11.	560,718	7,074,549	2,697,849	4,136,954,100
12.	910,359	2,832,068	4,728,067	3,469,261,950
13.	643,457	4,351,540	779,072	4,037,221,576
14.	1,032,502	8,468,172	193,428	3,566,654,400
15.	510,077	3,751,463	168,937	3,551,882,400
16.	771,122	5,709,499	598,088	3,062,683,910
17.	731,323	939,006	4,998,294	3,615,156,000
18.	868,137	6,620,214	587,661	876,157,250
19.	717,343	5,807,706	20,643	5,405,116,842
20.	422,907	2,484,976	665,852	2,286,100,760
21.	874,106	4,505,974	2,700,911	5,772,714,885
22.	543,598	3,071,680	1,149,383	4,014,699,920
23.	853,287	6,607,968	434,532	3,371,010,000
24.	1,015,769	5,137,738	3,376,325	3,746,187,720
25.	538,243	6,943,353	2,775,653	3,166,366,500

SIMPLE NUMBERS (page 61).

Examples.	66	67	68	69	70
1.	3,773,795,412,464	413,836	401,847	8,012	5,528
2.	4,855,635,673,500	218,323	684,710	6,825	4,590
3.	2,886,111,222,300	689,176	531,245	10,554	7,161
4.	6,261,524,085,117	343,214	722,239	9,026	6,578
5.	3,533,923,524,600	523,989	351,570	5,265	2,511
6.	5,532,820,384,000	905,613	902,230	7,365	3,735
7.	1,113,153,232,984	131,899	253,434	3,891	1,854
8.	1,425,756,363,120	77,913	441,406	6,475	4,612
9.	4,370,416,142,400	394,065	577,450	11,065	8,512
10.	4,238,406,139,800	233,036	667,160	7,552	5,173
11.	3,676,840,868,700	132,118	397,480	9,632	7,811
12.	3,084,604,801,245	470,591	791,825	6,197	3,566
13.	2,805,651,229,344	576,614	491,608	9,374	6,302
14.	9,075,982,492,800	744,519	916,690	6,301	3,070
15.	1,823,884,642,800	625,462	346,100	10,542	7,566
16.	4,492,643,318,306	116,039	653,673	5,411	3,362
17.	1,054,666,348,200	337,916	599,040	7,238	4,532
18.	5,943,364,652,875	392,035	783,665	2,975	338
19.	4,147,853,613,991	147,619	554,997	9,591	7,722
20.	992,534,626,256	538,114	277,412	8,744	5,702
21.	4,249,450,855,335	328,032	722,885	8,946	6,309
22.	1,660,606,987,809	227,636	378,547	10,018	7,756
23.	5,783,041,210,000	883,056	730,000	7,134	3,600
24.	5,755,265,356,215	73,324	903,627	4,794	3,408
25.	3,447,246,240,900	337,764	391,380	8,566	5,929

SIMPLE NUMBERS (pages 61, 63).

Examples.	71	72	73	82
1.	23,092	1,791 $\frac{1}{2}$	28 cows; \$ 36	914,041
2.	26,758	1,621 $\frac{1}{2}$	13 " 62	1,040,014
3.	53,741	2,380	22 " 42	976,067
4.	25,902	2,200 $\frac{3}{4}$	21 " 8	1,678
5.	31,761	771	30 " 12	63,306,000
6.	56,553	1,161 $\frac{1}{2}$	29 " 52	19,900,019
7.	25,836	781 $\frac{1}{2}$	9 " 32	170,000,007
8.	18,379	1,745 $\frac{1}{2}$	6 " 80	10,001,101
9.	25,130	2,823 $\frac{3}{4}$	23 " 28	305,050,000
10.	41,079	1,840	12 " 66	12,200,002
11.	13,243	2,691 $\frac{1}{2}$	12 " 54	1,018,008
12.	28,253	1,131 $\frac{1}{2}$	29 " 15	1,000,600,006
13.	42,578	2,084 $\frac{1}{2}$	23 " 33	904,000,094
14.	42,139	929 $\frac{1}{2}$	32 " 34	3,030,000,303
15.	30,850	2,436 $\frac{1}{2}$	32 " 24	2,000,412,014
16.	24,778	1,313	8 " 22	101,001,001
17.	40,814	1,605	14 " 66	6,000,060,600
18.	38,407	134 $\frac{1}{2}$	19 " 57	403,000,000,030
19.	14,109	2,651 $\frac{1}{2}$	13 " 49	1,000,017,000,000
20.	44,392	1,907 $\frac{1}{2}$	21 " 27	506,000,065,005
21.	36,216	2,185	15 " 33	4,004,000,004,000
22.	24,002	2,669	14 " 34	689,000,006,089
23.	41,270	1,102 $\frac{1}{2}$	31 " 55	42,000,000,040,200
24.	8,828	1,212	12 " 4	18,000,108,000,018
25.	36,046	2,048 $\frac{1}{2}$	16 " 6	4,047,000,004,700

SIMPLE NUMBERS (page 63).

	Lines	83	Ans.	Lines	84	Ans.
1.	1 and 2,		1,954,055	1 to 6,*		86,137,819
2.	2 " 3,		2,016,081	2 " 7,		255,223,785
3.	3 " 4,		977,745	3 " 8,		264,184,872
4.	4 " 5,		63,307,678	4 " 9,		568,258,805
5.	5 " 6,		83,206,019	5 " 10,		580,457,129
6.	6 " 7,		189,900,026	6 " 11,		518,169,137
7.	7 " 8,		180,001,108	7 " 12,		1,498,869,124
8.	8 " 9,		315,051,101	8 " 13,		2,232,869,211
9.	9 " 10,		317,250,002	9 " 14,		5,252,868,413
10.	10 " 11,		13,218,010	10 " 15,		6,948,230,427
11.	11 " 12,		1,001,618,014	11 " 16,		7,037,031,426
12.	12 " 13,		1,904,600,100	12 " 17,		13,036,074,018
13.	13 " 14,		3,934,000,397	13 " 18,		415,035,474,042
14.	14 " 15,		5,030,412,317	14 " 19,		1,414,148,473,948
15.	15 " 16,		2,101,413,015	15 " 20,		1,917,118,538,650
16.	16 " 17,		6,101,061,601	16 " 21,		5,919,118,130,636
17.	17 " 18,		409,000,060,630	17 " 22,		6,608,017,135,724
18.	18 " 19,		1,403,017,000,030	18 " 23,		48,602,017,115,324
19.	19 " 20,		1,506,017,065,005	19 " 24,		66,199,125,115,312
20.	20 " 21,		4,510,000,069,005	20 " 25,		69,246,108,120,012
21.	21 " 22,		4,693,000,010,089			
22.	22 " 23,		42,689,000,046,289			
23.	23 " 24,		60,000,108,040,218			
24.	24 " 25,		22,047,108,004,718			

* Inclusive.

SIMPLE NUMBERS (page 63).

Examples.	Lines	85	Ans.	86
1.	1 and 2,		125,973	5,484,246
2.	2 " 3,		63,947	6,240,084
3.	3 " 4,		974,389	5,856,402
4.	4 " 5,		63,304,322	10,068
5.	5 " 6,		43,405,981	379,836,000
6.	6 " 7,		150,099,988	119,400,114
7.	7 " 8,		159,998,906	1,020,000,042
8.	8 " 9,		295,048,899	60,006,606
9.	9 " 10,		292,849,998	1,830,300,000
10.	10 " 11,		11,181,994	73,200,012
11.	11 " 12,		999,581,998	6,108,048
12.	12 " 13,		96,599,912	6,003,600,036
13.	13 " 14,		2,126,000,209	5,424,000,564
14.	14 " 15,		1,029,588,289	18,180,001,818
15.	15 " 16,		1,899,411,013	12,002,472,084
16.	16 " 17,		5,899,059,599	606,006,006
17.	17 " 18,		396,999,939,430	36,000,363,600
18.	18 " 19,		597,016,999,970	2,418,000,000,180
19.	19 " 20,		494,016,934,995	6,000,102,000,000
20.	20 " 21,		3,497,999,938,995	3,036,000,390,030
21.	21 " 22,		3,314,999,997,911	24,024,000,024,000
22.	22 " 23,		41,311,000,034,111	4,134,000,036,534
23.	23 " 24,		23,999,892,040,182	252,000,000,241,200
24.	24 " 25,		13,953,107,995,318	108,000,648,000,108
25.				24,282,000,028,200

SIMPLE NUMBERS (page 63).

Examples.	87	88
1.	6,398,287	7,312,328
2.	7,280,098	8,320,112
3.	6,832,469	7,808,536
4.	11,746	13,424
5.	443,142,000	506,448,000
6.	139,300,133	159,200,152
7.	1,190,000,049	1,360,000,056
8.	70,007,707	80,008,808
9.	2,135,350,000	2,440,400,000
10.	85,400,014	97,600,016
11.	7,126,056	8,144,064
12.	7,004,200,042	8,004,800,048
13.	6,328,000,658	7,232,000,752
14.	21,210,002,121	24,240,002,424
15.	14,002,884,098	16,003,296,112
16.	707,007,007	808,008,008
17.	42,000,424,200	48,000,484,800
18.	2,821,000,000,210	3,224,000,000,240
19.	7,000,119,000,000	8,000,136,000,000
20.	3,542,000,455,035	4,048,000,520,040
21.	28,028,000,028,000	32,032,000,032,000
22.	4,823,000,042,623	5,512,000,048,712
23.	294,000,000,281,400	336,000,000,321,600
24.	126,000,756,126	144,000,864,000,144
25.	28,329,000,032,900	32,376,000,037,600

SIMPLE NUMBERS (page 63).

Examples.	89	90
1.	8,226,369	152,340½
2.	9,360,126	173,335½
3.	8,784,603	162,677½
4.	15,102	279½
5.	569,754,000	10,551,000
6.	179,100,171	3,316,669½
7.	1,530,000,063	28,333,334½
8.	90,009,909	1,666,850½
9.	2,745,450,000	50,841,666½
10.	109,800,018	2,033,333½
11.	9,162,072	169,668
12.	9,005,400,054	166,766,667½
13.	8,136,000,846	150,666,682½
14.	27,270,002,727	505,000,050½
15.	18,003,708,126	333,402,002½
16.	909,009,009	16,833,500½
17.	54,000,545,400	1,000,010,100
18.	3,627,000,000,270	67,166,666,671½
19.	9,000,153,000,000	166,669,500,000
20.	4,554,000,585,045	84,333,344,167½
21.	36,036,000,036,000	667,333,334,000
22.	6,201,000,054,801	114,833,334,348½
23.	378,000,000,361,800	7,000,000,006,700
24.	162,000,972,000,162	3,000,018,000,003
25.	36,423,000,042,300	674,500,000,783½

SIMPLE NUMBERS (page 63).

	91	92	93
1.	130,577 $\frac{7}{8}$	114,255 $\frac{1}{8}$	101,560 $\frac{1}{8}$
2.	148,573 $\frac{3}{8}$	130,001 $\frac{1}{8}$	115,557 $\frac{1}{8}$
3.	139,438 $\frac{1}{4}$	122,008 $\frac{3}{8}$	108,451 $\frac{3}{8}$
4.	239 $\frac{7}{8}$	209 $\frac{1}{8}$	186 $\frac{3}{8}$
5.	9,043,714 $\frac{3}{8}$	7,913,250	7,034,000
6.	2,842,859 $\frac{1}{8}$	2,487,502 $\frac{3}{8}$	2,211,113 $\frac{3}{8}$
7.	24,285,715 $\frac{1}{4}$	21,250,000 $\frac{7}{8}$	18,888,889 $\frac{1}{8}$
8.	1,428,728 $\frac{1}{4}$	1,250,137 $\frac{1}{8}$	1,111,233 $\frac{3}{8}$
9.	43,578,571 $\frac{1}{8}$	38,131,250	33,894,444 $\frac{1}{8}$
10.	1,742,857 $\frac{3}{8}$	1,525,000 $\frac{3}{8}$	1,355,555 $\frac{7}{8}$
11.	145,429 $\frac{1}{4}$	127,251	113,112
12.	142,942,858	125,075,000 $\frac{1}{8}$	111,177,778 $\frac{3}{8}$
13.	129,142,870 $\frac{1}{4}$	113,000,011 $\frac{1}{8}$	100,444,454 $\frac{1}{8}$
14.	432,857,186 $\frac{1}{4}$	378,750,037 $\frac{7}{8}$	336,666,700 $\frac{3}{8}$
15.	285,773,144 $\frac{1}{8}$	250,051,501 $\frac{1}{8}$	222,268,001 $\frac{1}{8}$
16.	14,428,714 $\frac{1}{4}$	12,625,125 $\frac{1}{8}$	11,222,333 $\frac{3}{8}$
17.	857,151,514 $\frac{1}{4}$	750,007,575	666,673,400
18.	57,571,428,575 $\frac{1}{4}$	50,375,000,003 $\frac{1}{8}$	44,777,777,781 $\frac{1}{8}$
19.	142,859,571,428 $\frac{1}{4}$	125,002,125,000	111,113,000,000
20.	72,285,723,572 $\frac{1}{4}$	63,250,008,125 $\frac{1}{8}$	56,222,229,445
21.	572,000,000,571 $\frac{1}{8}$	500,500,000,500	444,888,889,333 $\frac{3}{8}$
22.	98,428,572,298 $\frac{1}{8}$	86,125,000,761 $\frac{1}{8}$	76,555,556,232 $\frac{1}{8}$
23.	6,000,000,005,742 $\frac{1}{4}$	5,250,000,005,025	4,666,666,671,133 $\frac{3}{8}$
24.	2,571,444,000,002 $\frac{1}{4}$	2,250,013,500,002 $\frac{3}{8}$	2,000,012,000,002
25.	578,142,857,814 $\frac{1}{4}$	505,875,000,587 $\frac{1}{8}$	449,666,667,188 $\frac{3}{8}$

SIMPLE NUMBERS (page 63).

Examples.	94	95	96	97
1.	2,016	234	413	$30\frac{36}{108}$
2.	3,796	819	160	56
3.	8,019	594	558	$205\frac{9}{48}$
4.	2,160	648	84	27
5.	6,400	432	408	117
6.	5,775	833	120	$58\frac{48}{112}$
7.	3,584	1,820	44	$12\frac{48}{388}$
8.	6,392	1,190	240	$34\frac{44}{112}$
9.	4,131	1,224	129	$26\frac{34}{187}$
10.	6,048	648	366	$74\frac{3}{8}$
11.	7,392	748	512	256
12.	7,448	840	245	$171\frac{4}{11}$
13.	1,728	912	90	$6\frac{44}{134}$
14.	2,115	117	200	$27\frac{8}{108}$
15.	5,562	0	414	$76\frac{3}{8}$
16.	3,168	198	354	$47\frac{3}{8}$
17.	7,980	2,508	129	$46\frac{38}{180}$
18.	9,065	924	224	$129\frac{4}{11}$
19.	5,395	715	280	$49\frac{45}{130}$
20.	3,840	0	712	64
21.	5,236	2,652	54	$14\frac{44}{118}$
22.	7,728	1,680	284	$59\frac{44}{147}$
23.	6,039	385	756	$168\frac{4}{11}$
24.	8,372	1,092	399	357
25.	2,652	104	432	$41\frac{4}{11}$

UNITED STATES MONEY (page 73).

Examples.	105	106 ^{ct.}	107 ^{m.}	108	109
1.	\$ 12.25	1,840	12,250	\$ 1,275.92	\$ 295.94
2.	71.90	8,322	71,900	1,335.57	600.10
3.	25.62	3,641	25,620	1,289.29	459.263
4.	18.09	3,005	18,090	1,281.76	404.773
5.	130.06	20,475	130,060	1,393.73	1,332.833
6.	5.075	920	5,075	1,268.745	1,148.093
7.	1.908	563	1,908	1,265.578	1,155.09
8.	100.20	87,600	100,200	1,363.87	1,149.185
9.	49.72	10,035	49,720	1,313.39	206.125
10.	6.073	1,520	6,073	1,269.743	56.712
11.	0.275	136	275	1,263.945	70.443
12.	12.19	2,095	12,190	1,275.86	181.12
13.	0.255	40	255	1,263.925	161.30
14.	16.006	1,900	16,006	1,279.676	679.483
15.	49.24	6,307	49,240	1,312.91	645.275
16.	5.675	764	5,675	1,269.345	1,071.538
17.	99.56	41,928	99,560	1,363.23	1,415.781
18.	0.178	62	178	1,263.848	927.566
19.	38.005	50,057	38,005	1,301.675	938.523
20.	89.503	26,806	89,503	1,353.173	554.058
21.	0.925	2,970	925	1,264.595	645.379
22.	0.755	1,100	755	1,264.425	723.953
23.	54.09	10,002	54,090	1,317.76	
24.	4.444	44,444	4,444	1,268.114	
25.	9.099	10,010	9,099	1,272.789	

UNITED STATES MONEY (page 73).

Examples.	110	111	112	113	114
1.	\$ 881.60	\$ 6.15	\$ 110.40	\$ 85.75	\$ 165.60
2.	816.78	11.32	499.32	503.30	748.98
3.	863.59	10.79	218.46	179.34	327.69
4.	869.95	11.96	180.30	126.63	270.45
5.	695.25	74.69	1,228.50	910.42	1,842.75
6.	890.792	4.133	55.248	35.525	82.872
7.	894.368	3.724	33.792	13.356	50.688
8.	24.00	775.80	5,256.00	701.40	7,884.00
9.	799.65	50.63	602.10	348.04	903.15
10.	884.793	9.134	91.242	42.511	136.863
11.	898.64	1.085	8.16	1.925	12.24
12.	879.05	8.76	125.70	85.33	188.55
13.	899.598	0.147	2.412	1.785	3.618
14.	880.995	2.999	114.03	112.042	171.045
15.	836.928	13.832	378.432	344.68	567.648
16.	892.355	1.97	45.87	39.725	68.805
17.	480.72	319.72	2,515.68	696.92	3,773.52
18.	899.375	0.447	3.75	1.246	5.625
19.	399.43	462.565	3,003.42	266.035	4,505.13
20.	631.94	178.557	1,608.36	626.521	2,412.54
21.	870.30	28.775	178.20	6.475	267.30
22.	888.995	10.25	66.03	5.285	99.045
23.	799.98	45.93	600.12	378.63	900.18
24.	455.56	439.996	2,666.64	31.108	3,999.96
25.	799.90	91.001	600.60	63.693	900.90

UNITED STATES MONEY (page 73).

Examples.	115	116	117	118	119
1.	\$ 1.84	\$ 1.11	\$ 1.02	\$ 2.63	73 $\frac{1}{2}$
2.	8.32	6.54	6.00	11.89	332 $\frac{2}{3}$
3.	3.64	2.33	2.13	5.20	145 $\frac{1}{2}$
4.	3.01	1.64	1.51	4.29	120 $\frac{4}{5}$
5.	20.48	11.82	10.84	29.25	819
6.	0.92	0.46	0.42	1.32	36 $\frac{2}{3}$
7.	0.56	0.17	0.16	0.80	22 $\frac{1}{2}$
8.	87.60	9.11	8.35	125.14	3,504
9.	10.04	4.52	4.14	14.33	401 $\frac{1}{2}$
10.	1.52	0.55	0.51	2.17	60 $\frac{2}{3}$
11.	0.14	0.03	0.02	0.19	5 $\frac{1}{2}$
12.	2.10	1.11	1.02	2.99	83 $\frac{2}{3}$
13.	0.04	0.02	0.02	0.06	1 $\frac{1}{2}$
14.	1.90	1.46	1.33	2.72	76
15.	6.31	4.48	4.10	9.01	252 $\frac{7}{8}$
16.	0.76	0.52	0.47	1.09	30 $\frac{1}{2}$
17.	41.93	9.05	8.30	59.89	1,677 $\frac{3}{8}$
18.	0.06	0.16	0.01	0.09	2 $\frac{1}{2}$
19.	50.06	3.46	3.17	71.51	2,002 $\frac{7}{8}$
20.	26.81	8.14	7.46	38.29	1,072 $\frac{6}{8}$
21.	2.97	0.08	0.08	4.24	118 $\frac{2}{3}$
22.	1.10	0.07	0.06	1.57	44
23.	10.00	4.92	4.51	14.29	400 $\frac{2}{8}$
24.	44.44	0.40	0.37	63.49	1,777 $\frac{1}{2}$
25.	10.01	0.83	0.76	14.30	400 $\frac{1}{2}$

UNITED STATES MONEY (page 73).

Examples.	120	121	122	123
1.	115	2,450	\$ 239.20	230 lb.
2.	520 $\frac{3}{8}$	14,380	1,081.86	1,040 $\frac{3}{8}$
3.	227 $\frac{3}{8}$	5,124	473.33	455 $\frac{3}{8}$
4.	187 $\frac{1}{8}$	3,618	390.65	375 $\frac{3}{8}$
5.	1,279 $\frac{1}{8}$	26,012	2,661.75	2,559 $\frac{3}{8}$
6.	57 $\frac{3}{8}$	1,015	119.704	115
7.	35 $\frac{3}{8}$	381 $\frac{3}{8}$	73.216	70 $\frac{3}{8}$
8.	5,475	20,040	11,388.	10,950
9.	627 $\frac{3}{8}$	9,944	1,304.55	1,254 $\frac{3}{8}$
10.	95	1,214 $\frac{3}{8}$	197.691	190
11.	8 $\frac{3}{8}$	55	17.68	17
12.	130 $\frac{1}{8}$	2,438	272.35	261 $\frac{1}{8}$
13.	2 $\frac{3}{8}$	51	5.226	5
14.	118 $\frac{1}{8}$	3,201 $\frac{1}{8}$	247.065	237 $\frac{1}{8}$
15.	394 $\frac{3}{8}$	9,848	819.936	788 $\frac{3}{8}$
16.	47 $\frac{1}{8}$	1,135	99.385	95 $\frac{1}{8}$
17.	2,620 $\frac{3}{8}$	19,912	5,450.64	5,241
18.	3 $\frac{1}{8}$	35 $\frac{3}{8}$	8.125	7 $\frac{3}{8}$
19.	3,128 $\frac{3}{8}$	7,601	6,507.41	6,257 $\frac{1}{8}$
20.	1,675 $\frac{3}{8}$	17,900 $\frac{3}{8}$	3,484.78	3,350 $\frac{3}{8}$
21.	185 $\frac{1}{8}$	185	386.10	371 $\frac{3}{8}$
22.	68 $\frac{1}{8}$	151	143.065	137 $\frac{1}{8}$
23.	625 $\frac{3}{8}$	10,818	1,300.26	1,250 $\frac{3}{8}$
24.	2,777 $\frac{1}{8}$	888 $\frac{3}{8}$	5,777.72	5,555 $\frac{1}{8}$
25.	625 $\frac{1}{8}$	1,819 $\frac{3}{8}$	1,301.30	1,251 $\frac{1}{8}$

COMMON FRACTIONS (page 123).

Examples.	124	125	126	127	128	129
1.	5, 37.	2 ³ , 37.	37	72	$\frac{4}{5}$	$\frac{4}{5}$
2.	2 ³ , 3 ⁴ .	2 ³ , 3 ⁴ .	108	1,080	$\frac{2}{3}$	$\frac{1}{3}$
3.	2, 3, 5, 13.	2 ³ , 3 ² , 11, 13.	78	576	$\frac{5}{8}$	$\frac{1}{8}$
4.	7, 83.	2 ³ , 83.	83	1,596	$\frac{7}{8}$	$\frac{1}{8}$
5.	2 ³ , 3 ⁵ .	2 ³ , 3 ⁵ , 5.	108	84	$\frac{1}{10}$	$\frac{2}{3}$
6.	2, 7, 43.	2, 3, 5, 43.	86	96	$\frac{7}{8}$	$\frac{1}{8}$
7.	2 ⁴ , 23.	2 ³ , 3 ³ , 23.	92	240	$\frac{4}{5}$	$\frac{4}{5}$
8.	5 ² , 17.	5, 7, 17.	85	63	$\frac{4}{5}$	$\frac{1}{5}$
9.	127.	2, 3, 127.	127	31,050	$\frac{1}{8}$	$\frac{1}{4}$
10.	2 ³ , 3, 13.	2 ³ , 7, 13.	104	1,680	$\frac{3}{4}$	$\frac{3}{4}$
11.	2 ⁴ , 7, 11.	2 ³ , 5, 7, 11.	308	1,365	$\frac{4}{5}$	$\frac{2}{5}$
12.	769.	2, 769.	769	360	$\frac{1}{2}$	$\frac{2}{3}$
13.	2 ³ , 11 ² .	2 ³ , 3, 11 ² .	968	855	$\frac{1}{3}$	$\frac{4}{5}$
14.	3, 947.	5, 947.	947	1,232	$\frac{3}{8}$	$\frac{1}{4}$
15.	2 ³ , 5, 17.	2 ⁴ , 3, 17.	68	270	$\frac{1}{2}$	$\frac{2}{3}$
16.	647.	647.	647	770	$\frac{1}{2}$	$\frac{1}{2}$
17.	2, 3, 23.	2 ⁴ , 23.	46	255	$\frac{3}{8}$	$\frac{1}{3}$
18.	2 ³ , 3, 7.	2, 3, 7, 13.	42	31,720	$\frac{4}{13}$	$\frac{1}{4}$
19.	3, 7, 23.	3, 11, 23.	69	190	$\frac{7}{11}$	$\frac{2}{3}$
20.	3 ⁵ .	2 ³ , 3 ⁴ .	81	132	$\frac{3}{4}$	$\frac{2}{3}$
21.	5, 89.	2, 3, 89.	89	936	$\frac{5}{8}$	$\frac{2}{3}$
22.	5, 97.	3 ² , 97.	97	684	$\frac{5}{8}$	$\frac{2}{3}$
23.	2 ³ , 3, 67.	2 ³ , 5, 67.	268	252	$\frac{1}{10}$	$\frac{4}{5}$
24.	2 ³ , 5, 31.	2 ³ , 3 ² , 31.	124	5,115	$\frac{5}{8}$	$\frac{2}{3}$
25.	2 ³ , 103.	2, 7, 103.	206	390	$\frac{7}{8}$	$\frac{1}{2}$

COMMON FRACTIONS (page 123).

Examples.	130	131	132	133	134	135	136	137
1.	$1\frac{3}{8}$	$2\frac{3}{8}$	$8\frac{7}{8}$	$101\frac{1}{10}$	$\frac{3}{8}$	$59\frac{3}{8}$	$5\frac{1}{10}$	$60\frac{1}{8}$
2.	$1\frac{3}{8}$	$1\frac{7}{8}$	$9\frac{5}{10}$	$74\frac{3}{8}$	$\frac{3}{8}$	$2\frac{7}{8}$	$15\frac{3}{8}$	$3\frac{3}{8}$
3.	$1\frac{3}{8}$	$2\frac{3}{8}$	$5\frac{3}{8}$	$93\frac{3}{8}$	$\frac{3}{8}$	$45\frac{3}{8}$	$13\frac{7}{8}$	$46\frac{7}{8}$
4.	$1\frac{4}{8}$	$1\frac{9}{10}$	$11\frac{3}{8}$	$126\frac{7}{8}$	$\frac{1}{8}$	$47\frac{7}{8}$	$19\frac{1}{8}$	$47\frac{7}{10}$
5.	$1\frac{8}{10}$	$2\frac{3}{10}$	$8\frac{3}{10}$	$147\frac{1}{10}$	$\frac{3}{8}$	$41\frac{1}{8}$	$36\frac{1}{10}$	$41\frac{3}{8}$
6.	$1\frac{3}{10}$	$2\frac{3}{10}$	$6\frac{3}{10}$	$142\frac{3}{10}$	$\frac{3}{8}$	$63\frac{3}{8}$	$27\frac{3}{8}$	$64\frac{7}{8}$
7.	$1\frac{3}{8}$	$2\frac{1}{10}$	$5\frac{3}{8}$	$110\frac{7}{8}$	$\frac{1}{8}$	$64\frac{3}{8}$	$11\frac{3}{8}$	65
8.	$1\frac{3}{8}$	$1\frac{7}{10}$	$3\frac{1}{10}$	$92\frac{3}{8}$	$\frac{3}{8}$	$41\frac{7}{8}$	$19\frac{3}{8}$	$42\frac{1}{10}$
9.	$1\frac{3}{8}$	$1\frac{3}{8}$	$3\frac{3}{8}$	$154\frac{7}{8}$	$\frac{3}{8}$	$20\frac{3}{8}$	$51\frac{1}{8}$	$21\frac{3}{8}$
10.	$1\frac{3}{8}$	$2\frac{3}{10}$	$6\frac{3}{10}$	$129\frac{3}{8}$	$\frac{1}{10}$	$7\frac{3}{8}$	$43\frac{3}{8}$	$8\frac{3}{8}$
11.	$1\frac{3}{10}$	$2\frac{3}{10}$	$11\frac{1}{10}$	$157\frac{3}{8}$	$\frac{3}{8}$	$55\frac{3}{8}$	$25\frac{3}{8}$	$56\frac{1}{10}$
12.	$1\frac{3}{10}$	$1\frac{3}{10}$	$4\frac{3}{10}$	$124\frac{3}{8}$	$\frac{1}{10}$	$23\frac{3}{8}$	$32\frac{3}{8}$	$24\frac{3}{8}$
13.	$1\frac{3}{8}$	$2\frac{3}{8}$	$4\frac{7}{8}$	$110\frac{7}{8}$	$\frac{3}{8}$	$11\frac{7}{8}$	$42\frac{3}{8}$	$12\frac{1}{8}$
14.	$1\frac{3}{8}$	$1\frac{3}{10}$	$7\frac{3}{10}$	$167\frac{3}{8}$	$\frac{3}{8}$	$31\frac{1}{8}$	$50\frac{3}{8}$	$32\frac{3}{8}$
15.	$1\frac{7}{8}$	$1\frac{3}{8}$	$6\frac{1}{4}$	$167\frac{3}{8}$	$\frac{1}{8}$	$35\frac{3}{8}$	$48\frac{3}{8}$	$36\frac{1}{8}$
16.	$1\frac{3}{8}$	$1\frac{3}{8}$	4	$156\frac{7}{10}$	$\frac{3}{8}$	$21\frac{1}{8}$	$53\frac{3}{10}$	$22\frac{1}{10}$
17.	$1\frac{3}{8}$	$2\frac{3}{8}$	$4\frac{3}{8}$	$156\frac{3}{8}$	$\frac{1}{8}$	$33\frac{3}{8}$	$48\frac{3}{8}$	$34\frac{1}{8}$
18.	$1\frac{1}{10}$	$1\frac{1}{10}$	$8\frac{3}{8}$	$121\frac{7}{8}$	$\frac{3}{8}$	$20\frac{3}{8}$	$32\frac{1}{8}$	$21\frac{3}{10}$
19.	$1\frac{1}{10}$	$1\frac{3}{10}$	$10\frac{3}{8}$	$160\frac{3}{8}$	$\frac{3}{8}$	$56\frac{3}{8}$	$29\frac{3}{10}$	$57\frac{3}{10}$
20.	$1\frac{1}{10}$	$1\frac{3}{8}$	$5\frac{3}{10}$	$125\frac{3}{10}$	$\frac{1}{10}$	$21\frac{3}{8}$	$40\frac{1}{10}$	$21\frac{3}{8}$
21.	$1\frac{1}{10}$	$1\frac{3}{10}$	$10\frac{7}{8}$	$147\frac{1}{10}$	$\frac{1}{10}$	$41\frac{7}{8}$	$27\frac{1}{10}$	$42\frac{7}{8}$
22.	$1\frac{1}{10}$	$1\frac{3}{10}$	$4\frac{3}{8}$	$91\frac{1}{10}$	$\frac{3}{8}$	$38\frac{3}{8}$	$14\frac{3}{8}$	$39\frac{3}{8}$
23.	$1\frac{1}{10}$	$1\frac{3}{10}$	$9\frac{3}{10}$	$184\frac{3}{8}$	$\frac{1}{10}$	$20\frac{3}{8}$	$54\frac{3}{8}$	$21\frac{1}{4}$
24.	$\frac{3}{8}$	$1\frac{3}{8}$	$8\frac{1}{8}$	$147\frac{1}{10}$	$\frac{3}{10}$	$59\frac{7}{8}$	$26\frac{1}{8}$	$60\frac{1}{10}$
25.	$1\frac{1}{10}$	$1\frac{3}{10}$	$8\frac{1}{10}$	$137\frac{7}{8}$	$\frac{3}{8}$	$25\frac{1}{8}$	$32\frac{3}{8}$	$26\frac{1}{10}$

COMMON FRACTIONS (page 123).

Examples.	138	139	140	141	142	143	144	145
1.	$\frac{6^5}{144}$	$\frac{1}{8}$	$5\frac{3^3}{216}$	$\frac{7}{18}$	$2\frac{1}{12}$	$\frac{1}{2}$	$6\frac{1}{2}$	$5\frac{1}{8}$
2.	$\frac{280}{280}$	$\frac{2}{1}$	$3\frac{2}{7}$	$\frac{8}{8}$	$\frac{3}{1}$	$\frac{1}{4}$	$6\frac{1}{2}$	$3\frac{1}{2}$
3.	$\frac{336}{336}$	$\frac{3}{3}$	$2\frac{1}{11}$	$\frac{7^5}{242}$	$1\frac{5^4}{221}$	$\frac{1}{11}$	$4\frac{1}{11}$	$3\frac{1}{11}$
4.	$\frac{16}{16}$	$\frac{2}{2}$	$5\frac{5^3}{300}$	$\frac{1}{5}$	$1\frac{3}{10}$	$\frac{2}{5}$	$6\frac{1}{2}$	$5\frac{1}{2}$
5.	$\frac{1}{10}$	$\frac{1}{30}$	$5\frac{1}{300}$	$\frac{1}{3}$	$3\frac{2}{3}$	$\frac{1}{4}$	$13\frac{1}{15}$	$6\frac{2}{3}$
6.	$\frac{222}{222}$	$\frac{1}{30}$	$4\frac{7^8}{1100}$	$\frac{2}{15}$	$1\frac{5}{10}$	$\frac{1}{7}$	$7\frac{1}{7}$	$5\frac{1}{70}$
7.	$\frac{1}{8}$	$\frac{1}{3}$	$3\frac{5^5}{804}$	$\frac{1}{3}$	$1\frac{1}{2}$	$\frac{2}{7}$	$7\frac{1}{7}$	$3\frac{1}{2}$
8.	$\frac{121}{1008}$	$\frac{1}{42}$	$1\frac{1}{24}$	$\frac{3}{8}$	$1\frac{5}{82}$	$\frac{1}{8}$	$5\frac{1}{8}$	$1\frac{1}{27}$
9.	$\frac{2^5}{216}$	$\frac{1}{3}$	$1\frac{2}{8}$	$\frac{2^5}{216}$	$\frac{1}{48}$	$\frac{1}{36}$	$19\frac{1}{8}$	$1\frac{1}{8}$
10.	$\frac{77}{77}$	$\frac{1}{11}$	$4\frac{2}{3}$	$1\frac{1}{10}$	$3\frac{2}{3}$	$\frac{1}{3}$	$19\frac{1}{11}$	$5\frac{1}{2}$
11.	$\frac{7}{70}$	$\frac{1}{20}$	$8\frac{1}{336}$	$\frac{1}{2}$	$4\frac{1}{12}$	$\frac{1}{4}$	$18\frac{1}{3}$	$8\frac{1}{3}$
12.	$\frac{127}{127}$	$\frac{1}{22}$	$\frac{1}{81}$	$\frac{3}{8}$	$\frac{1}{81}$	$\frac{1}{8}$	$6\frac{1}{11}$	$1\frac{1}{7}$
13.	$\frac{1}{3}$	$\frac{1}{33}$	$1\frac{39}{398}$	$\frac{1}{12}$	$1\frac{1}{8}$	$\frac{1}{108}$	$4\frac{1}{11}$	$2\frac{1}{8}$
14.	$\frac{1}{17}$	$\frac{1}{15}$	$3\frac{1}{21}$	$\frac{1}{48}$	$1\frac{1}{4}$	$\frac{1}{3}$	$8\frac{1}{15}$	$3\frac{1}{3}$
15.	$\frac{1}{19}$	$\frac{1}{48}$	$2\frac{1}{12}$	$\frac{1}{25}$	$\frac{1}{48}$	$\frac{1}{48}$	$10\frac{1}{8}$	$3\frac{1}{15}$
16.	$\frac{1}{18}$	$\frac{1}{3}$	$1\frac{1}{8}$	$\frac{1}{25}$	$\frac{1}{33}$	$\frac{1}{28}$	$17\frac{1}{3}$	$1\frac{1}{8}$
17.	$\frac{1}{84}$	$\frac{1}{2}$	$2\frac{1}{182}$	$\frac{1}{8}$	$1\frac{1}{84}$	$\frac{1}{2}$	$15\frac{1}{9}$	$2\frac{1}{9}$
18.	$\frac{1}{16}$	$\frac{1}{3}$	$4\frac{1}{16}$	$\frac{1}{8}$	$1\frac{1}{16}$	$\frac{1}{8}$	9	$5\frac{1}{3}$
19.	$\frac{1}{18}$	$\frac{1}{11}$	$6\frac{1}{118}$	$\frac{1}{16}$	$1\frac{1}{18}$	$\frac{1}{42}$	$15\frac{1}{11}$	$7\frac{1}{2}$
20.	$\frac{1}{189}$	$\frac{1}{16}$	$1\frac{1}{9}$	$\frac{1}{189}$	$1\frac{1}{189}$	$\frac{1}{21}$	$4\frac{1}{9}$	$1\frac{1}{9}$
21.	$\frac{1}{22}$	$\frac{1}{4}$	$5\frac{1}{22}$	$\frac{1}{44}$	$1\frac{1}{44}$	$\frac{1}{11}$	14	$5\frac{1}{2}$
22.	$\frac{1}{12}$	$\frac{1}{9}$	$2\frac{1}{108}$	$\frac{1}{78}$	$\frac{1}{66}$	$\frac{1}{24}$	8	$2\frac{1}{9}$
23.	$\frac{1}{108}$	$\frac{1}{110}$	$6\frac{1}{108}$	$\frac{1}{91}$	$\frac{1}{119}$	$\frac{1}{11}$	$20\frac{1}{11}$	$6\frac{1}{8}$
24.	$\frac{1}{24}$	$\frac{1}{9}$	$4\frac{1}{3}$	$\frac{1}{17}$	$\frac{1}{85}$	$\frac{1}{39}$	10	$4\frac{1}{15}$
25.	$\frac{1}{33}$	$\frac{1}{14}$	$2\frac{1}{154}$	$\frac{1}{117}$	$\frac{1}{143}$	$\frac{1}{331}$	9	$2\frac{1}{3}$

COMMON FRACTIONS (page 123).

Examples.	146	147	148	149	150	151	152	153
1.	$113\frac{3}{8}$	$94\frac{1}{2}$	$1\frac{1}{2}$	$\frac{1}{10}$	$\frac{1}{12}$	81	$\frac{4}{5}$	$1\frac{1}{2}$
2.	$362\frac{1}{2}$	$202\frac{3}{4}$	$3\frac{3}{8}$	$\frac{5}{8}$	$\frac{3}{8}$	30	$\frac{1}{2}$	$2\frac{3}{4}$
3.	$110\frac{3}{4}$	$86\frac{2}{7}$	$1\frac{3}{8}$	$\frac{4}{8}$	$\frac{4}{4}$	$76\frac{3}{4}$	$\frac{7}{8}$	$3\frac{3}{4}$
4.	346	$281\frac{1}{8}$	$1\frac{5}{7}$	$\frac{3}{8}$	$\frac{1}{8}$	$142\frac{1}{2}$	$\frac{1}{8}$	$2\frac{1}{2}$
5.	$600\frac{1}{4}$	$282\frac{3}{8}$	$1\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{8}$	98	$\frac{3}{8}$	$6\frac{1}{4}$
6.	$262\frac{3}{8}$	$182\frac{3}{8}$	$2\frac{3}{4}$	$\frac{1}{10}$	$\frac{8}{8}$	$108\frac{3}{4}$	$\frac{3}{8}$	$5\frac{1}{8}$
7.	$156\frac{3}{4}$	$72\frac{1}{4}$	$1\frac{1}{7}$	$\frac{5}{8}$	$\frac{7}{8}$	120	$\frac{3}{8}$	$3\frac{1}{4}$
8.	149	$33\frac{1}{2}$	$1\frac{1}{2}$	$\frac{1}{8}$	$\frac{4}{4}$	144	$\frac{3}{8}$	$13\frac{1}{8}$
9.	$1,247\frac{3}{4}$	$126\frac{7}{8}$	$2\frac{1}{8}$	$\frac{1}{4}$	$\frac{1}{8}$	120	$\frac{7}{8}$	$23\frac{1}{4}$
10.	$968\frac{3}{4}$	$260\frac{1}{8}$	$1\frac{1}{8}$	$\frac{1}{8}$	$\frac{1}{4}$	$60\frac{1}{3}$	$\frac{1}{8}$	$9\frac{3}{4}$
11.	$742\frac{7}{8}$	$347\frac{1}{8}$	$1\frac{3}{8}$	$\frac{3}{8}$	$\frac{1}{4}$	$113\frac{3}{4}$	$\frac{1}{8}$	$3\frac{1}{8}$
12.	$877\frac{1}{2}$	141	$6\frac{1}{8}$	$\frac{7}{8}$	$\frac{1}{8}$	$65\frac{1}{4}$	$\frac{3}{8}$	$9\frac{1}{4}$
13.	$226\frac{1}{2}$	$130\frac{1}{2}$	$1\frac{1}{4}$	$\frac{7}{8}$	$\frac{8}{8}$	$68\frac{3}{4}$	$\frac{3}{8}$	$15\frac{1}{4}$
14.	908	$364\frac{3}{8}$	$1\frac{3}{4}$	$\frac{5}{8}$	$\frac{1}{8}$	$113\frac{1}{4}$	$\frac{1}{4}$	$8\frac{1}{8}$
15.	$979\frac{1}{2}$	$296\frac{3}{8}$	$2\frac{1}{2}$	$\frac{1}{8}$	$\frac{1}{2}$	$154\frac{3}{4}$	$\frac{1}{8}$	$9\frac{1}{4}$
16.	1,221	$122\frac{1}{10}$	3	$\frac{1}{4}$	$\frac{8}{8}$	$128\frac{1}{2}$	$\frac{1}{10}$	$25\frac{1}{2}$
17.	$872\frac{3}{4}$	$165\frac{1}{4}$	$1\frac{1}{2}$	$\frac{2}{8}$	$\frac{1}{8}$	97	$\frac{2}{8}$	$15\frac{3}{4}$
18.	$523\frac{1}{4}$	$295\frac{1}{8}$	$2\frac{3}{8}$	$\frac{3}{8}$	$\frac{1}{8}$	87	$\frac{3}{8}$	$5\frac{3}{8}$
19.	$725\frac{1}{8}$	$328\frac{3}{8}$	4	$\frac{4}{8}$	$\frac{3}{8}$	133	$\frac{4}{8}$	$4\frac{1}{2}$
20.	$490\frac{3}{8}$	$191\frac{1}{4}$	$1\frac{1}{4}$	$\frac{1}{8}$	$\frac{4}{8}$	$115\frac{1}{2}$	$\frac{3}{8}$	$10\frac{1}{10}$
21.	$870\frac{3}{4}$	$332\frac{1}{4}$	$3\frac{1}{4}$	$\frac{1}{10}$	$\frac{7}{8}$	$85\frac{3}{4}$	$\frac{5}{4}$	$3\frac{3}{8}$
22.	$220\frac{3}{8}$	$68\frac{3}{8}$	$2\frac{3}{4}$	$\frac{3}{8}$	$\frac{1}{8}$	$108\frac{3}{10}$	$\frac{1}{2}$	$4\frac{3}{8}$
23.	1,780	$565\frac{5}{8}$	$5\frac{3}{8}$	$\frac{1}{10}$	$\frac{7}{8}$	$106\frac{1}{4}$	$\frac{3}{8}$	$7\frac{1}{2}$
24.	$496\frac{7}{8}$	$225\frac{1}{4}$	$3\frac{1}{4}$	$\frac{5}{4}$	$\frac{2}{8}$	$302\frac{1}{4}$	$\frac{3}{8}$	$4\frac{3}{4}$
25.	$1,031\frac{1}{2}$	$282\frac{3}{4}$	$4\frac{1}{4}$	$\frac{4}{8}$	$\frac{3}{8}$	$85\frac{1}{8}$	$\frac{3}{4}$	$5\frac{1}{4}$

COMMON FRACTIONS (page 123).

Examples.	154	155	156	157	158	159	160
1.	$1\frac{1}{18}$	$\frac{106}{108}$	$3\frac{23}{24}$	$\frac{11}{12}$	$1\frac{1}{18}$	$80\frac{1}{10}$	$1\frac{23}{24}$
2.	$1\frac{1}{18}$	$\frac{147}{140}$	$11\frac{23}{120}$	$1\frac{67}{80}$	$1\frac{10}{10}$	150 $\frac{1}{4}$	$41\frac{121}{120}$
3.	$1\frac{1}{14}$	$\frac{115}{112}$	$31\frac{11}{16}$	$\frac{26}{24}$	$\frac{3}{2}$	46 $\frac{1}{2}$	$\frac{266}{241}$
4.	$1\frac{23}{24}$	$\frac{640}{477}$	$31\frac{1}{2}$	$\frac{25}{24}$	$\frac{3}{2}$	145 $\frac{1}{2}$	$\frac{561}{313}$
5.	$1\frac{1}{11}$	$\frac{1}{6}$	$2\frac{2}{3}$	$\frac{1}{6}$	$1\frac{17}{20}$	135 $\frac{1}{10}$	$\frac{2851}{241}$
6.	$1\frac{5}{21}$	$\frac{315}{88}$	$31\frac{6}{13}$	$1\frac{20}{40}$	$1\frac{1}{2}$	77 $\frac{1}{3}$	$\frac{200}{202}$
7.	$1\frac{1}{11}$	$\frac{168}{111}$	$21\frac{1}{2}$	$\frac{7}{3}$	$1\frac{1}{2}$	61 $\frac{1}{2}$	$\frac{168}{168}$
8.	$1\frac{1}{2}$	$\frac{31}{2}$	$2\frac{1}{2}$	$\frac{7}{8}$	$\frac{3}{2}$	32 $\frac{1}{2}$	$\frac{447}{702}$
9.	$6\frac{1}{2}$	$1\frac{1}{2}$	4 $\frac{1}{2}$	$1\frac{1}{2}$	$1\frac{1}{2}$	107 $\frac{1}{2}$	$\frac{133}{133}$
10.	$3\frac{37}{40}$	$\frac{3120}{14749}$	$21\frac{1}{2}$	$\frac{100}{1029}$	$1\frac{1}{2}$	155 $\frac{1}{2}$	$\frac{5310}{29580}$
11.	$1\frac{23}{24}$	$\frac{147}{176}$	$21\frac{1}{7}$	$\frac{20}{20}$	$\frac{28}{28}$	241 $\frac{1}{2}$	$\frac{1588}{1588}$
12.	$5\frac{1}{2}$	$\frac{77}{162}$	$28\frac{1}{2}$	$1\frac{1}{2}$	$1\frac{1}{2}$	129 $\frac{1}{2}$	$\frac{438}{438}$
13.	$1\frac{1}{2}$	$\frac{198}{198}$	$2\frac{1}{2}$	$\frac{36}{121}$	$1\frac{1}{2}$	59 $\frac{1}{2}$	$\frac{172}{172}$
14.	$1\frac{1}{2}$	$\frac{274}{18225}$	$5\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{2}$	159 $\frac{1}{2}$	$\frac{383}{383}$
15.	$1\frac{1}{2}$	$\frac{27}{12}$	$5\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{2}$	152 $\frac{1}{2}$	$\frac{171}{171}$
16.	6	$1\frac{1}{11}$	5	$1\frac{1}{2}$	$1\frac{1}{2}$	103 $\frac{1}{10}$	$\frac{268}{268}$
17.	$4\frac{1}{2}$	$\frac{19}{19}$	$2\frac{1}{2}$	$\frac{1}{2}$	$1\frac{1}{2}$	106 $\frac{1}{2}$	$\frac{211}{12953}$
18.	$1\frac{1}{2}$	$\frac{132}{132}$	$4\frac{1}{2}$	$1\frac{1}{2}$	$1\frac{1}{2}$	135 $\frac{1}{2}$	$\frac{7547}{10747}$
19.	$1\frac{1}{2}$	$\frac{131}{131}$	$6\frac{1}{2}$	$2\frac{1}{2}$	$1\frac{1}{2}$	201 $\frac{1}{2}$	$\frac{14984}{14984}$
20.	$1\frac{1}{2}$	$\frac{1}{2}$	$6\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{2}$	91 $\frac{1}{2}$	$\frac{3300}{3300}$
21.	$2\frac{1}{2}$	$\frac{70}{383}$	$61\frac{1}{2}$	$1\frac{1}{2}$	$1\frac{1}{2}$	256 $\frac{1}{2}$	$\frac{3424}{3424}$
22.	$1\frac{1}{2}$	$\frac{112}{112}$	$5\frac{1}{2}$	$1\frac{1}{2}$	$1\frac{1}{2}$	62 $\frac{1}{2}$	$\frac{1385}{1385}$
23.	$2\frac{1}{2}$	$\frac{11}{2}$	$8\frac{1}{2}$	$2\frac{1}{2}$	$1\frac{1}{2}$	312 $\frac{1}{2}$	$\frac{2182}{2182}$
24.	$\frac{1}{2}$	$\frac{20}{20}$	$\frac{7}{2}$	$1\frac{1}{2}$	$1\frac{1}{2}$	135 $\frac{1}{2}$	$\frac{761}{761}$
25.	$21\frac{1}{2}$	$\frac{18}{18}$	$14\frac{1}{2}$	$1\frac{1}{2}$	$\frac{1}{2}$	224 $\frac{1}{2}$	$\frac{3188}{3188}$

COMMON FRACTIONS (page 123).

Examples.	161	162	163	164	165	166	167
1.	$16\frac{1}{2}$	$12\frac{2}{3}$	$10\frac{2}{3}$	$1\frac{1}{2}$	$5\frac{1}{2}$	$1\frac{1}{2}$	$4\frac{1}{2}$
2.	$43\frac{1}{2}$	$7\frac{1}{2}$	$16\frac{1}{2}$	$1\frac{2}{3}$	$17\frac{1}{2}$	$1\frac{1}{2}$	$5\frac{1}{2}$
3.	$23\frac{1}{2}$	$20\frac{1}{2}$	7	$1\frac{1}{2}$	$14\frac{1}{2}$	$3\frac{1}{2}$	$3\frac{1}{2}$
4.	$35\frac{1}{2}$	$14\frac{1}{2}$	$22\frac{1}{2}$	$\frac{1}{2}$	$22\frac{1}{2}$	$2\frac{1}{2}$	$8\frac{1}{2}$
5.	$53\frac{1}{2}$	$13\frac{1}{2}$	$9\frac{1}{2}$	$1\frac{1}{2}$	$29\frac{1}{2}$	$3\frac{1}{2}$	$5\frac{1}{2}$
6.	$73\frac{1}{2}$	$19\frac{1}{2}$	$14\frac{1}{2}$	$1\frac{1}{2}$	$25\frac{1}{2}$	$4\frac{1}{2}$	$2\frac{1}{2}$
7.	$18\frac{1}{2}$	$22\frac{1}{2}$	$8\frac{1}{2}$	$1\frac{1}{2}$	$7\frac{1}{2}$	$1\frac{1}{2}$	$2\frac{1}{2}$
8.	$46\frac{1}{2}$	$48\frac{1}{2}$	$7\frac{1}{2}$	$3\frac{1}{2}$	$15\frac{1}{2}$	$3\frac{1}{2}$	$1\frac{1}{2}$
9.	$203\frac{1}{2}$	$38\frac{1}{2}$	14	$\frac{1}{2}$	$35\frac{1}{2}$	$2\frac{1}{2}$	$\frac{1}{2}$
10.	$59\frac{1}{2}$	$10\frac{1}{2}$	$7\frac{1}{2}$	$1\frac{1}{2}$	$29\frac{1}{2}$	$2\frac{1}{2}$	$2\frac{1}{2}$
11.	$43\frac{1}{2}$	$10\frac{1}{2}$	$15\frac{1}{2}$	$1\frac{1}{2}$	17	$1\frac{1}{2}$	$7\frac{1}{2}$
12.	$73\frac{1}{2}$	$57\frac{1}{2}$	$8\frac{1}{2}$	$1\frac{1}{2}$	$30\frac{1}{2}$	$1\frac{1}{2}$	$1\frac{1}{2}$
13.	$60\frac{1}{2}$	$24\frac{1}{2}$	$4\frac{1}{2}$	$1\frac{1}{2}$	$41\frac{1}{2}$	$9\frac{1}{2}$	$3\frac{1}{2}$
14.	$70\frac{1}{2}$	$25\frac{1}{2}$	$10\frac{1}{2}$	$1\frac{1}{2}$	$48\frac{1}{2}$	$3\frac{1}{2}$	$3\frac{1}{2}$
15.	$122\frac{1}{2}$	$29\frac{1}{2}$	21	$\frac{1}{2}$	$44\frac{1}{2}$	$3\frac{1}{2}$	$2\frac{1}{2}$
16.	222	$43\frac{1}{2}$	$14\frac{1}{2}$	$\frac{1}{2}$	$37\frac{1}{2}$	$2\frac{1}{2}$	$2\frac{1}{2}$
17.	$79\frac{1}{2}$	$29\frac{1}{2}$	$5\frac{1}{2}$	$1\frac{1}{2}$	$36\frac{1}{2}$	$3\frac{1}{2}$	$1\frac{1}{2}$
18.	$97\frac{1}{2}$	$12\frac{1}{2}$	$25\frac{1}{2}$	$\frac{1}{2}$	$31\frac{1}{2}$	$3\frac{1}{2}$	$2\frac{1}{2}$
19.	$187\frac{1}{2}$	$13\frac{1}{2}$	$59\frac{1}{2}$	$\frac{1}{2}$	$22\frac{1}{2}$	$2\frac{1}{2}$	$5\frac{1}{2}$
20.	$59\frac{1}{2}$	$34\frac{1}{2}$	10	$\frac{1}{2}$	$39\frac{1}{2}$	$4\frac{1}{2}$	$3\frac{1}{2}$
21.	$70\frac{1}{2}$	$14\frac{1}{2}$	$19\frac{1}{2}$	$1\frac{1}{2}$	$22\frac{1}{2}$	$1\frac{1}{2}$	$7\frac{1}{2}$
22.	$65\frac{1}{2}$	$23\frac{1}{2}$	$25\frac{1}{2}$	$3\frac{1}{2}$	$10\frac{1}{2}$	$1\frac{1}{2}$	$2\frac{1}{2}$
23.	$300\frac{1}{2}$	$12\frac{1}{2}$	$53\frac{1}{2}$	$1\frac{1}{2}$	$43\frac{1}{2}$	$2\frac{1}{2}$	$2\frac{1}{2}$
24.	265	$20\frac{1}{2}$	$176\frac{1}{2}$	$\frac{1}{2}$	$23\frac{1}{2}$	$2\frac{1}{2}$	$3\frac{1}{2}$
25.	$77\frac{1}{2}$	$25\frac{1}{2}$	$18\frac{1}{2}$	$3\frac{1}{2}$	$30\frac{1}{2}$	$1\frac{1}{2}$	$4\frac{1}{2}$

COMMON FRACTIONS (page 123).

Examples.	168	169	170	171	172	173	174	175	176
1.	$9\frac{3}{4}$	$38\frac{2}{7}$	$21\frac{3}{8}$	$34\frac{1}{2}$	\$ 67.50	$1\frac{1}{2}$	\$9.26	$4\frac{1}{11}$	45
2.	$3\frac{3}{4}$	$14\frac{4}{9}$	$19\frac{1}{8}$	$19\frac{1}{2}$	126.00	$1\frac{1}{2}$	9.53	$5\frac{4}{9}$	$19\frac{1}{11}$
3.	$13\frac{1}{2}$	$34\frac{1}{10}$	$13\frac{1}{2}$	$29\frac{1}{2}$	28.00	$1\frac{1}{2}$	5.48	$2\frac{1}{2}$	21
4.	$7\frac{3}{8}$	$49\frac{1}{3}$	$21\frac{2}{11}$	$37\frac{3}{8}$	117.00	$1\frac{3}{13}$	16.47	$5\frac{1}{8}$	52
5.	$12\frac{8}{11}$	$45\frac{3}{13}$	56	42	92.40	$2\frac{4}{13}$	7.39	$4\frac{50}{103}$	$12\frac{1}{8}$
6.	$17\frac{3}{13}$	51	$13\frac{1}{2}$	$43\frac{1}{2}$	44.57	$1\frac{1}{3}$	13.37	$3\frac{1}{2}$	$18\frac{4}{7}$
7.	$17\frac{1}{11}$	48	28	38	46.25	$2\frac{6}{17}$	5.76	$3\frac{1}{19}$	$8\frac{1}{8}$
8.	$40\frac{1}{2}$	$43\frac{1}{3}$	$11\frac{4}{13}$	$29\frac{1}{2}$	10.89	$4\frac{1}{2}$	2.57	$1\frac{1}{11}$	2
9.	$32\frac{1}{2}$	$46\frac{2}{13}$	$29\frac{1}{4}$	$43\frac{1}{2}$	53.67	$9\frac{1}{4}$	7.87	$2\frac{1}{8}$	$2\frac{1}{2}$
10.	$10\frac{1}{4}$	$29\frac{1}{7}$	90	$34\frac{1}{2}$	107.50	$3\frac{1}{3}$	3.87	$4\frac{48}{103}$	$7\frac{1}{11}$
11.	$9\frac{1}{5}$	$50\frac{1}{5}$	$73\frac{1}{2}$	49	206.50	$2\frac{8}{9}$	12.53	$6\frac{1}{8}$	$18\frac{1}{8}$
12.	$15\frac{1}{5}$	$31\frac{1}{3}$	$27\frac{1}{5}$	$38\frac{1}{2}$	92.59	$6\frac{1}{5}$	16.97	$3\frac{1}{2}$	$4\frac{1}{2}$
13.	$19\frac{1}{3}$	$31\frac{1}{11}$	$12\frac{1}{2}$	$25\frac{1}{2}$	14.38	$1\frac{1}{3}$	2.68	$1\frac{1}{3}$	$6\frac{1}{2}$
14.	$13\frac{1}{2}$	$49\frac{1}{2}$	28	$44\frac{1}{2}$	102.86	$2\frac{1}{2}$	13.20	$4\frac{1}{2}$	$10\frac{1}{2}$
15.	$16\frac{1}{2}$	$56\frac{1}{8}$	24	$46\frac{1}{2}$	98.00	$3\frac{1}{2}$	19.60	$4\frac{3}{8}$	$7\frac{1}{13}$
16.	35	$48\frac{1}{8}$	$27\frac{1}{2}$	44	48.40	10	8.47	2	$2\frac{1}{2}$
17.	$26\frac{1}{2}$	$45\frac{1}{2}$	$39\frac{1}{2}$	$44\frac{1}{2}$	54.78	$5\frac{8}{9}$	4.79	$2\frac{1}{8}$	$3\frac{1}{2}$
18.	$8\frac{1}{2}$	$35\frac{1}{2}$	$18\frac{1}{2}$	$32\frac{1}{2}$	95.33	$1\frac{1}{2}$	15.66	$4\frac{1}{2}$	$16\frac{1}{2}$
19.	$11\frac{2}{3}$	$55\frac{1}{3}$	$22\frac{1}{3}$	$49\frac{2}{3}$	163.40	$2\frac{2}{3}$	49.02	$5\frac{1}{3}$	$15\frac{1}{3}$
20.	$15\frac{1}{2}$	42	$16\frac{1}{2}$	33	47.14	$2\frac{1}{2}$	8.49	$3\frac{1}{2}$	$7\frac{1}{2}$
21.	$8\frac{1}{2}$	$40\frac{1}{2}$	$34\frac{1}{2}$	$45\frac{1}{2}$	220.00	$2\frac{1}{2}$	23.83	$6\frac{1}{2}$	$14\frac{1}{2}$
22.	$15\frac{1}{2}$	$37\frac{1}{2}$	$14\frac{1}{2}$	30	44.59	$3\frac{1}{2}$	11.29	$2\frac{1}{2}$	$5\frac{1}{2}$
23.	$9\frac{1}{2}$	$47\frac{1}{2}$	$33\frac{1}{2}$	$50\frac{1}{2}$	248.89	$3\frac{1}{2}$	48.53	$6\frac{1}{2}$	$13\frac{1}{2}$
24.	$13\frac{1}{2}$	$71\frac{1}{2}$	$16\frac{1}{2}$	$46\frac{1}{2}$	102.00	$2\frac{1}{2}$	75.89	$4\frac{1}{2}$	$12\frac{1}{2}$
25.	$9\frac{1}{2}$	$36\frac{1}{2}$	$31\frac{1}{2}$	$41\frac{1}{2}$	184.89	$3\frac{1}{2}$	25.42	$5\frac{1}{2}$	$9\frac{1}{2}$

DECIMAL FRACTIONS (page 135).

Examples.	179	180	181	182	183
1.	25.002	$\frac{1}{40}$	$\frac{1002}{5000}$	0.056	25.027
2.	0.0206	$\frac{103}{5000}$	$\frac{206}{10000}$	0.5937...	25.7706
3.	700.8	$\frac{3504}{5000}$	$\frac{657}{10000}$	0.0556	701.1504
4.	0.00404	$\frac{101}{10000}$	$\frac{10}{4000}$	0.0015	1.01404
5.	50.5050	$\frac{250}{1000}$	$\frac{10}{1000}$	0.575	300.505
6.	8.96	$\frac{1}{1250}$	$\frac{44}{1000}$	0.0025	8.9608
7.	5,002.05	$\frac{3001}{2000}$	$\frac{5}{2}$	0.1481...	5,018.055
8.	0.00016	$\frac{1000}{62500}$	$\frac{1}{125}$	0.8125	8,000.00016
9.	0.000112	$\frac{28}{200000}$	$\frac{32}{250000}$	0.2312...	5.600112
10.	2.25	$\frac{177}{7800}$	$\frac{101}{1000}$	0.0703...	2.958
11.	701.6	$\frac{4841}{2500}$	$\frac{452}{2500}$	0.064	720.964
12.	2.206	$\frac{1206}{50000}$	$\frac{226}{25000}$	1.0625	2.2576
13.	0.0936	$\frac{438}{4000}$	$\frac{1001}{25000}$	0.3809...	1.8256
14.	54.054	$\frac{2012}{10000}$	$\frac{130}{25000}$	0.9166...	8,070.054
15.	806.001047	$\frac{88}{2500}$	$\frac{10788}{250000}$	0.5555...	810.951047
16.	500.26	$\frac{3}{2500}$	$\frac{353}{20000}$	0.4666...	500.272
17.	0.001000	$\frac{10007}{100000}$	$\frac{101}{100000}$	0.0378...	12.008
18.	0.000029	$\frac{452}{1000000}$	$\frac{338}{1000000}$	8.2272...	45.900029
19.	8.46291	$\frac{8621}{100000}$	$\frac{402}{100000}$	0.6785...	17.08391
20.	0.511	$\frac{281}{500000}$	$\frac{27}{250000}$	0.0769...	0.51662
21.	4,271.0004271	$\frac{1002}{100000}$	$\frac{381}{200000}$	0.1904...	5,273.0004271
22.	68,000.41	$\frac{1}{2}$	$\frac{101}{10000}$	0.2941...	68,002.325
23.	0.122	$\frac{61}{5000}$	$\frac{12}{1000}$	0.2857...	0.244
24.	8.041	$\frac{383}{50000}$	$\frac{10}{50000}$	2.9473...	9.0571
25.	500.01	$\frac{1501}{10000}$	$\frac{101}{10000}$	0.0875	508.401

DECIMAL FRACTIONS (page 135)

Examples.	184	185	186
1.	5,025.002	5,025.027	24.977
2.	1.6686	27.4186	25.7294
3.	701.457	701.8074	700.4496
4.	0.00654	1.01654	1.00596
5.	50.51	300.51	199.495
6.	456.96	456.9608	8.9592
7.	5,004.55	5,020.555	4986.045
8.	0.00816	8,000.00816	7999.99984
9.	1.680112	7.280112	5.599888
10.	609.25	609.958	1.542
11.	719.68	739.044	682.236
12.	11.366	11.4176	2.1544
13.	800.1936	801.9256	1.6384
14.	54.0592	8,070.0592	7,961.946
15.	808.077347	813.027347...	801.051047
16.	518.525	518.537	500.248
17.	0.0111	12.0181	12.006
18.	3.071229	48.971229	45.899971
19.	88.52291	97.14391	0.15809
20.	5.911	5.91662	0.50538
21.	4,271.6809271	5,273.6809271	3,269.0004271
22.	68,004.521	68,006.396	67,998.575
23.	24.522	24.644	0.
24.	8.0430 $\frac{1}{2}$	9.0580 $\frac{1}{2}$	7.027 $\frac{1}{2}$
25.	501.137 $\frac{1}{2}$	509.472 $\frac{1}{2}$	491.73 $\frac{1}{2}$

DECIMAL FRACTIONS (page 135).

Examples.	187	188	189
1.	4,999.975	4,974.998	0.62505
2.	24.102	1.6274	0.53045
3.	0.3066	700.143	245.56032
4.	1.0075	0.00154	0.0040804
5.	249.995	50.5	12,626.25
6.	447.9992	439.04	0.007168
7.	13.505	4,999.55	80,057.81025
8.	7,999.992	0.00784	1.28
9.	3.92	1.679888	0.0006272
10.	606.292	604.75	1.593
11.	1.284	683.52	13,585.7824
12.	9.1084	6.954	0.1138296
13.	798.368	800.0064	0.1621152
14.	8,015.9948	54.0488	433,296.864
15.	2.8737	803.924747	3,989.70518265
16.	18.253	481.995	6.00312
17.	11.9969	0.0091	0.012007
18.	42.8288	3.071171	0.0013311
19.	71.439	71.59709	72.95874711
20.	5.39438	4.889	0.00287182
21.	1,001.3195	4,270.3199271	4,279,542.4279542
22.	2.196	67,996.379	127,500.84375
23.	24.278	24.278	0.014884
24.	1.0148	8.04264	8.1635
25.	7.2634	498.9954	4,167.77744

DECIMAL FRACTIONS (page 135).

Examples.	190	191	192
1.	125	125 010	0.000999...
2.	42.436	0.0339488	1,250
3.	0.2302128	460.4256	0.0005
4.	0.002525	0.0000101	250
5.	1.25	0.252525	4.950004...
6.	0.3584	4,014.08	0.000089...
7.	40.0125	12,505.125	0.003199...
8.	64	0.00000128	50,000,000
9.	9.408	0.00018816	50,000
10.	429.756	1,365.75	0.314666...
11.	350.10112	12,684.928	0.027599...
12.	0.472656	20.20696	0.023390...
13.	1,385.7732	74.88936	18.504273...
14.	41.6832	0.2810808	148.296148...
15.	10.277685	1,673.4999738861	0.006141...
16.	0.219180	9,137.2489	0.000023...
17.	0.1212707	0.0000101	12,007
18.	140.96808	0.0000890648	1,582,758.620689...
19.	690.19726	677.5405746	1.018680...
20.	0.030348	2.7594	0.010998...
21.	681.861	2,906.41579064155	0.234605...
22.	7.633125	276,829.83195	0.000027...
23.	2.9768	2.9768	1
24.	0.000203	0.0016084	0.126198...
25.	8.92619	535.5714	0.016666 ...

DECIMAL FRACTIONS (page 135).

Examples.	193	194	195
1.	200,000	199.984...	5,000.50002
2.	0.064	80	259.148206
3.	1.875	0.000937...	11.169
4.	0.002475...	0.618811...	10.1025404
5.	0.00002	0.000099...	2,500.51005
6.	560,000	50	448.0976
7.	0.156201...	0.000499...	212.5705
8.	0.000001	50	80,000.0080016
9.	0.3	15,000	57.68000112
10.	857.344632...	269.777777...	614.1025
11.	0.933691...	0.025769...	218.736
12.	177.519379...	4.152311...	9.69806
13.	461.951501...	8,548.076923...	817.420936
14.	0.0000006...	0.000096...	80,160.54574
15.	0.419454...	0.002576...	59.63631047
16.	1,522.083333...	0.036511...	23.3876
17.	0.000841...	10.1	120.08011
18.	0.066910...	105,903.448275...	462.07120029
19.	9.286625...	9.460102...	166.3546291
20.	960.854092...	10.567514...	5.46131
21.	0.000679...	0.000159...	10,063.390504271
22.	2.1712	0.000059...	702.8255
23.	200	200	25.62122
24.	0.000197...	0.000002...	10.23043
25.	0.128502...	0.002141...	89.4165...

COMPOUND NUMBERS (page 171).

Examples.	196	197	198
1.	10,000 lb.	120 oz.	86,854 oz.
2.	11,200 lb.	543 lb.	2,079 lb.
3.	1,200 pwt.	234 pwt.	870 pwt.
4.	26,400 ft.	16 ft.	572 ft.
5.	512,000 sq. rd.	64½ sq. yd.	7,689 sq. rd.
6.	233,280 cu. in.	24,521 cu. in.	307,362 cu. in.
7.	640 cu. ft.	302 cu. ft.	11,884 cu. ft.
8.	160 gi.	7 pt.	37 pt.
9.	320 pt.	79 pt.	170 qt.
10.	108,000'	5,894"	1,008,148"
11.	43,800 hours.	8,355 hours.	17,706 hours.
12.	2,635,200 min.	1,270 min.	11,285 min.
13.	990 in.	33 in.	3,110 in.
14.	24,200 sq. yd.	11,774 sq. in.	735,345 sq. in.
15.	80 pt.	7 gi.	54 gi.
16.	18,000"	4,138"	67,014"
17.	2,400 gr.	551 gi.	5,732 gi.
18.	180 in.	27 in.	196 in.
19.	1,361½ sq. ft.	89 sq. ft.	53,001 sq. in.
20.	40 gi.	7 gi.	22 gi.
21.	50,400 min.	1,421 min.	642 hours.
22.	6,480 sq. in.	3,916 sq. in.	5,652 sq. in.
23.	432,000 sec.	2,898 sec.	244,542 min.
24.	720 sq. in.	25,740 sq. in.	146,998 sq. in.
25.	720 units.	250	1,197

COMPOUND NUMBERS (page 171).

Examples.	199	200
1.	$1\frac{331}{800}$ T.	66 T. 687 lb.
2.	$1\frac{331}{800}$ T.	59 T. 4 cwt. 2 qr. 23 lb.
3.	$13\frac{41}{80}$ lb.	552 lb. 10 oz. 7 pwt.
4.	$\frac{821}{1320}$ m.	25 m. 41 rd. 3 yd. $1\frac{1}{2}$ ft.
5.	$\frac{821}{1320}$ sq. m.	1 sq. m. 189 A. 47 sq. rd.
6.	$\frac{821}{1320}$ cu. yd.	2 cu. yd. 22 cu. ft. 1,359 cu. in.
7.	$25\frac{31}{2}$ cd.	1,036 cd. 4 cd. ft. 15 cu. ft.
8.	$102\frac{4}{8}$ gal.	4,146 gal. 1 qt. 1 pt. 3 gi.
9.	$51\frac{4}{8}$ bu.	2,073 bu. 7 qt. 1 pt.
10.	$\frac{821}{8400}$ circ.	6 circ. $51^{\circ} 27'$.
11.	$\frac{821}{1190}$ c. y.	15 y. 53 d. 15 h.
12.	$\frac{821}{131780}$ l. y.	92 d. 3 h. 27 min.
13.	$16\frac{43}{8}$ rd.	2 m. 30 rd. 2 ft. 3 in.
14.	$\frac{821}{1210}$ A.	27 A. 66 sq. rd. $10\frac{1}{2}$ sq. yd.
15.	$205\frac{1}{4}$ pk.	2,073 bu. 7 qt. 1 pt.
16.	$\frac{821}{800}$ °	$36^{\circ} 51' 27''$.
17.	$61\frac{91}{80}$ oz.	23 lb. 0 oz. 8 pwt. 15 gr.
18.	$91\frac{1}{8}$ yd.	2 m. 30 rd. 2 ft. 3 in.
19.	$12\frac{88}{1080}$ sq. rd.	3 A. 7 sq. rd. 11 sq. yd. $2\frac{1}{4}$ sq. ft.
20.	$410\frac{1}{2}$ qt.	4,146 gal. 1 qt. 1 pt. 3 gi.
21.	$\frac{821}{1020}$ week.	13 w. 1 d. 3 h. 27 min.
22.	$21\frac{11}{32}$ sq. yd.	3 sq. rd. 11 sq. yd. 5 sq. ft. 99 sq. in.
23.	$\frac{821}{11600}$ d.	1 d. 12 h. 51 m. 27 s.
24.	$22\frac{38}{8}$ sq. ft.	3 sq. rd. 11 sq. yd. 5 sq. ft. 99 sq. in.
25.	$22\frac{38}{8}$ gross.	76 gr. gr. 9 gr. 5 doz. 3.

COMPOUND NUMBERS (page 171).

Examples.	201	202	203
1.	1,454 $\frac{1}{11}$ lb.	925.4 lb.	11111 T.
2.	1,629 $\frac{1}{11}$ lb.	1,036.448 lb.	$1\frac{2}{8}$ cwt.
3.	174 $\frac{1}{11}$ pwt.	111.048 pwt.	$\frac{1}{8}$ lb.
4.	3,840 ft.	2,443.056 ft.	$\frac{1}{8}$ rd.
5.	74,472 $\frac{1}{11}$ sq. rd.	47,380.48 sq. rd.	$1\frac{2}{8}$ A.
6.	33,931 $\frac{1}{11}$ cu. in.	21,587.7312 cu. in.	11111 cu. yd.
7.	93 $\frac{1}{11}$ cu. ft.	59.2256 cu. ft.	$\frac{1}{8}$ cd.
8.	23 $\frac{1}{11}$ gi.	14.8064 gi.	$\frac{1}{8}$ gal.
9.	46 $\frac{1}{11}$ pt.	29.6128 pt.	$1\frac{1}{8}$ bu.
10.	15,709 $\frac{1}{11}$ '	9,994.32'	11111 °
11.	6,370 $\frac{1}{11}$ hours.	4,053.252 hours.	11111 c. y.
12.	383,301 $\frac{1}{11}$ min.	243,861.408 min.	11111 d.
13.	144 in.	91.6146 in.	$\frac{1}{8}$ rd.
14.	3,520 sq. rd.	2,239.468 sq. yd.	11111 sq. rd.
15.	11 $\frac{1}{11}$ pt.	7.4032 pt.	$\frac{1}{8}$ qt.
16.	2,618 $\frac{1}{11}$ "	1,665.72"	11111 °
17.	349 $\frac{1}{11}$ gr.	222.096 gr.	$1\frac{1}{8}$ oz.
18.	26 $\frac{1}{11}$ in.	16.6572 in.	$\frac{1}{8}$ yd.
19.	198 sq. ft.	125.9700 $\frac{1}{8}$ sq. ft.	$1\frac{1}{8}$ sq. yd.
20.	5 $\frac{1}{11}$ gi.	3.7016 gi.	$\frac{1}{8}$ qt.
21.	7,330 $\frac{1}{11}$ min.	4,664.016 min.	$\frac{1}{8}$ w.
22.	942 $\frac{1}{11}$ sq. in.	599.6592 sq. in.	$\frac{1}{8}$ sq. yd.
23.	62,836 $\frac{1}{11}$ sec.	39,977.28 sec.	11111 d.
24.	104 $\frac{1}{11}$ sq. in.	66.6288 sq. in.	11111 sq. rd.
25.	104 $\frac{1}{11}$.	66.6288	$\frac{1}{8}$ gross.

COMPOUND NUMBERS (page 171).

Ex.	204	205	206
1.	0.3128... T.	$\frac{3}{800}$	7 T. 61 lb. 10 oz.
2.	0.6375 l. T.	$\frac{543}{7940}$	6 l. T. 16 cwt. 18 lb.
3.	0.6875 lb.	$\frac{2}{3}$	14 lb. 3 oz. 9 pwt.
4.	0.6272... m.	$\frac{1}{330}$	10 m. 236 rd. 2 yd. [yd.
5.	0.8750... sq. m.	$\frac{1133}{810000}$	1 sq. m. 608 A. 15 sq. rd. 4 sq. [yd.
6.	0.1674... cu. yd.	$\frac{24531}{440000}$	15 cu. yd. 7 cu. ft. 1007 cu. in.
7.	0.3593... cd.	$\frac{23}{4}$	195 cd. 4 cd. ft. 8 cu. ft.
8.	0.75 gal.	$\frac{7}{8}$	31 gal. 1 qt.
9.	0.7812... bu.	$\frac{11}{16}$	16 bu. 1 pk. 2 qt. 1 pt.
10.	0.2518... circ.	$\frac{2147}{840000}$	2 circ. 12° 20' 42".
11.	0.0123... c. y.	$\frac{44}{1000}$	5 y. 360 d. 9 h.
12.	0.1796... l. y.	$\frac{137}{81000}$	1 l. y. 74 d. 11 h. 15 m.
13.	0.9698... m.	$\frac{1}{8}$	7 m. 6 rd. 1 yd. 11 in.
14.	0.1827... A.	$\frac{5817}{3180000}$	5 A. 48 sq. rd. 9 sq. yd. 83 sq. in.
15.	0.3125 pk.	$\frac{7}{8}$	8 pk. 2 qt. 1 gi.
16.	0.8625°.	$\frac{1363}{10000}$	74° 37' 37".
17.	0.8416... lb.	$\frac{171}{400}$	6 lb. 11 oz. 3 pwt. 19 gr.
18.	0.1292... m.	$\frac{3}{4}$	3 m. 42 rd. 2 yd. 2 ft. 1 in.
19.	0.9733... sq. rd.	$\frac{346}{10000}$	7 sq. rd. 19 sq. yd. 6 sq. ft. 81 sq. [in.
20.	0.25 qt.	$\frac{1}{4}$	1 gal. 2 qt. 1 pt. 3 gi.
21.	0.5 wk.	$\frac{121}{10000}$	32 w. 3 d. 5 h. 41 m.
22.	0.0092... sq. yd.	$\frac{37}{4000}$	28 sq. yd. 3 sq. ft. 76 sq. in.
23.	0.5479... d.	$\frac{161}{40000}$	1 y. 89 d. 9 h. 39 m. 18 s.
24.	0.0169... sq. rd.	$\frac{173}{10000}$	15 sq. rd. 115 sq. ft. 28 sq. in.
25.	0.5972... gro.	$\frac{143}{1000}$	1 gr. gr. 10 gr. 7 doz. 9.

COMPOUND NUMBERS (page 171).

Examples.	207	208
1.	3 T. 285 lb. $8\frac{3}{4}$ oz.	1164 lb. $4\frac{1}{2}$ oz.
2.	1 l. T. 7 cwt. 15 lb.	16 cwt. 1 qr. 18.616 lb.
3.	4 lb. $12\frac{3}{4}$ pwt.	1 lb. 6 oz. 12.816 pwt.
4.	171 rd. 4 yd. $1\frac{1}{4}$ ft.	186 rd. 0.952 ft.
5.	322 A. $54\frac{1}{2}$ rd.	370 A. 30 sq. rd. 8.84 sq. yd.
6.	7 cu. yd. $765\frac{3}{4}$ cu. in.	1 cu. yd. 2 cu. ft. 1,394.8304 cu. in.
7.	93 cd. 2 cd. ft. $2\frac{3}{4}$ cu. ft.	2 cd. 7 cd. ft. 8.0352 cu. ft.
8.	5 gal. $1\frac{1}{2}$ gi.	1 gal. 1 qt. 1 pt. 2.5088 gi.
9.	5 bu. 2 pk. $7\frac{1}{2}$ qt.	1 bu. 3 pk. 2 qt. 0.0176 pt.
10.	1 circ. $74^{\circ} 19' 36\frac{3}{4}''$.	$209^{\circ} 51' 40.4''$.
11.	2 c. y. 164 d. $4\frac{1}{2}$ h.	1 y. 194 d. 5.784 h.
12.	164 d. 16 h. $39\frac{3}{4}$ m.	212 d. 13 h. 49.936 m.
13.	16 rd. 2 ft. $2\frac{3}{4}$ in.	4 yd. 3.5232 in.
14.	87 sq. rd. 89 sq. ft. $55\frac{3}{4}$ ^[sq. in.]	92 sq. rd. 25 sq. yd. 4 sq. ft. 124.976 ^[sq. in.]
15.	1 pk. 2 qt. $1\frac{1}{2}$ gi.	5 qt. 1 pt. 0.0176 gi.
16.	$19^{\circ} 2' 36\frac{3}{4}''$.	$1^{\circ} 43' 40.24''$.
17.	1 lb. 7 pwt. $9\frac{1}{4}$ gr.	1 oz. 14 pwt. 12.632 gr.
18.	5 yd. 2 ft. $7\frac{3}{4}$ in.	1 yd. 11.8224 in.
19.	1 sq. rd. 23 sq. yd. 5 sq. ft. $70\frac{1}{4}$ ^[in.] sq.	27 sq. yd. 3.4694 sq. ft.
20.	3 qt. $1\frac{1}{2}$ gi.	1 qt. 3.6272 gi.
21.	4 w. 1 d. 18 h.	5 d. 51.272 m.
22.	4 sq. yd. 7 sq. ft. $15\frac{3}{4}$ ^[in.] sq.	3 sq. yd. 5 sq. ft. 57.6064 sq. in.
23.	170 d. 5 h. $59\frac{1}{4}$ m.	14 h. 41 m. 11.76 s.
24.	3 sq. rd. 204 sq. ft. $71\frac{1}{4}$ ^[sq. in.]	179 sq. ft. 47.2896 sq. in.
25.	8 gr. 8 doz. $10\frac{1}{4}$.	2 gr. 3 doz. 9.2896.

COMPOUND NUMBERS (page 171).

Ex.	209	210
1.	2 T. 1420 lb. 14 oz.	1 T. 1,197 lb. 6 oz.
2.	13 cwt. 2 qr. 24 lb.	4 l. T. 14 cwt. 21 lb.
3.	2 lb. 7 oz. 16 pwt.	6 lb. 15 pwt.
4.	33 rd. 3 yd. 2 ft. 6 in.	10 m. 166 rd. 1 ft.
5.	48 A. 6 sq. rd. 26 sq. yd. 2 sq. ft. 36 sq. in.	1 sq. m. 511 A. 155 sq. rd.
6.	6 cu. yd. 1 cu. ft. 1,177 cu. in.	1 cu. yd. 15 cu. ft. 1,122 cu. in.
7.	90 cd. 3 cd. ft. 14 cu. ft.	7 cd. 4 cd. ft. 2 cu. ft.
8.	3 gal. 3 qt.	21 gal. 1 pt.
9.	4 bu. 2 qt. 1 pt.	4 bu. 1 pk. 7 qt.
10.	278° 24' 14".	170° 37' 32".
11.	1 y. 24 d. 15 h.	361 d. 18 h.
12.	6 d. 22 h. 55 m.	1 l. y. 57 d. 21 h. 55 m.
13.	15 rd. 8 ft. 11 in.	6 m. 294 rd. 3 yd. 1 ft. 10 in.
14.	18 sq. rd. 13 sq. yd. 7 sq. ft. 43 sq. in.	5 A. 10 sq. rd. 132 sq. ft. 27 sq. ^[in.]
15.	5 qt. 1 pt. 3 gi.	6 pk. 3 qt. 1 pt. 2 gi.
16.	17° 27' 56".	36° 14' 51".
17.	10 oz. 15 pwt. 21 gr.	4 lb. 10 oz. 3 pwt. 4 gr.
18.	4 yd. 2 ft. 1 in.	3 m. 40 rd. 2 yd. 2 in.
19.	31 sq. yd. 9 sq. in.	4 sq. rd. 18 sq. yd. 7 sq. ft. 27 ^[sq. in.]
20.	1 qt. 1 pt. 3 gi.	1 pt.
21.	3 w. 4 d. 18 h. 19 m.	24 w. 4 d. 18 h.
22.	1 sq. yd. 3 sq. ft. 8 sq. in.	16 sq. yd. 5 sq. ft. 120 sq. in.
23.	169 d. 18 h. 53 m. 42 s.	114 d. 17 h. 27 m.
24.	3 sq. rd. 25 sq. ft. 46 sq. in.	7 sq. rd. 72 sq. ft. 116 sq. in.
25.	6 gr. 6 doz. 11.	4 gr. 3 doz. 5.

COMPOUND NUMBERS (page 171).

Examples.

211

- | | |
|-----|---|
| 1. | 25 T. 1,754 lb. 8 oz. |
| 2. | 33 l. T. 16 cwt. 2 qr. |
| 3. | 58 lb. 1 oz. 10 pwt. |
| 4. | 63 m. 244 rd. 2 yd. |
| 5. | 11 sq. m. 160 A. 24 sq. rd. |
| 6. | 49 cu. yd. 216 cu. in. |
| 7. | 602 cd. 1 cd. ft. 4 cu. ft. |
| 8. | 154 gal. 2 qt. |
| 9. | 58 bu. 2 pk. 6 qt. |
| 10. | 7 circ. 184°. |
| 11. | 18 c. y. 27 d. |
| 12. | 7 l. y. 28 d. 12 h. |
| 13. | 41 m. 262 rd. 1 yd. |
| 14. | 31 A. 15 sq. rd. 123 sq. ft. 108 sq. in. |
| 15. | 43 pk. 7 qt. |
| 16. | 329° 10' 30". |
| 17. | 35 lb. 12 pwt. |
| 18. | 18 m. 248 rd. 1 yd. |
| 19. | 35 sq. rd. 25 sq. yd. 3 sq. ft. 108 sq. in. |
| 20. | 4 gal. 3 qt. 1 pt. |
| 21. | 171 w. |
| 22. | 4 sq. rd. 5 sq. yd. 72 sq. in. |
| 23. | 4 y. 247 d. 6 h. 54 m. |
| 24. | 66 sq. rd. 3 sq. yd. 108 sq. in. |
| 25. | 6 gr. gr. 3 gr. 7 doz. |

COMPOUND NUMBERS (page 171).

Examples.	212	213
1.	112 lb. 8 oz.	862 lb. 9½ oz.
2.	31. T. 12 cwt. 2 qr. 25 lb.	11 cwt. 1 qr. 2 lb. 12½ oz.
3.	14 lb. 7 oz. 10 pwt.	11 oz. 12 pwt. 12 gr.
4.	14 rd. 3 yd.	1 m. 20 rd. 1 ft. 2½ in.
5.	31 sq. rd. 29 sq. yd. 6 sq. ft. 108 sq. in.	120 A. 12 sq. yd. 129½ sq. in.
6.	7 cu. yd. 23 cu. ft. 1,479 cu. in.	22 cu. ft. 90 cu. in.
7.	35 cd. 3 cd. ft. 2 cu. ft.	10 cd. 4½ cu. ft.
8.	13 gal. 1 pt.	2 gal. 2 qt. 2½ gi.
9.	18 bu. 2 pk. 1 pt.	3 pk. 7 qt. 2½ gi.
10.	24° 33' 30".	45° 4'.
11.	14 y. 111 d. 21 h.	109 d. 22 h. 48 m.
12.	13 d. 5 h. 30 m.	43 d. 4 h. 12 m.
13.	2 rd. 2 yd. 2 ft. 3 in.	223 rd. 7½ in.
14.	4 sq. rd. 15 sq. yd. 2 sq. ft. 66 sq. in.	82 sq. rd. 251 sq. ft. 90 sq. in.
15.	1 pk. 5 qt. 1 gi.	5 qt. 1 pt. 2½ gi.
16.	17° 14' 30".	5° 29' 10½".
17.	1 lb. 5 oz. 4 pwt. 9 gr.	7 oz. 4½ gr.
18.	2 rd. 9 in.	100 rd. 2 ft. 3 in.
19.	4 sq. rd. 27 sq. yd. 3 sq. ft.	18 sq. yd. 90 sq. in.
20.	3 gal. 1 qt. 1 gi.	2½ gi.
21.	14 d. 19 h. 15 m.	2 w. 5 d. 22 h. 48 m.
22.	1 sq. rd. 15 sq. yd. 96 sq. in.	2 sq. yd. 130½ sq. in.
23.	12 h. 4 m. 30 s.	28 d. 10 h. 54 m. 54 s.
24.	9 sq. rd. 25 sq. yd. 6 sq. ft.	1 sq. rd. 3 sq. yd. 99 sq. in.
25.	2 gr. gr. 2 gr. 6.	1 gr. 3 doz. 1½.

COMPOUND NUMBERS (page 171).

Examples.	214	215
1.	775 lb. $7\frac{1}{2}$ oz.	21,713 $\frac{1}{2}$
2.	2 cwt. 2 qr. 17 lb.	519 $\frac{1}{2}$
3.	6 oz. 4 pwt. $6\frac{1}{2}$ gr.	217 $\frac{1}{2}$
4.	4 rd. 5 yd. $8\frac{1}{2}$ in.	143
5.	6 A. 138 sq. rd. 12 sq. yd. 8 sq. ft. $97\frac{1}{2}$ ^[sq. in.]	1,922 $\frac{1}{2}$
6.	25 cu. ft. 708 $\frac{1}{2}$ cu. in.	76,840 $\frac{1}{2}$
7.	13 cd. 2 cd. ft. $1\frac{1}{2}$ cu. ft.	2,971
8.	2 qt. 1 pt. $1\frac{1}{2}$ gi.	9 $\frac{1}{2}$
9.	3 pk. $2\frac{1}{2}$ gi.	42 $\frac{1}{2}$
10.	40° 21 $\frac{1}{2}$ ".	252,037
11.	105 d. 9 h. 25 m. 42 $\frac{1}{2}$ s.	4,426 $\frac{1}{2}$
12.	1 d. 2 h. 52 m. $8\frac{1}{2}$ s.	2,821 $\frac{1}{2}$
13.	2 rd. 4 ft. $\frac{2}{3}$ in.	777 $\frac{1}{2}$
14.	2 sq. rd. 185 sq. ft. $1\frac{1}{2}$ sq. in.	183,836 $\frac{1}{2}$
15.	1 pt. $3\frac{1}{2}$ gi.	13 $\frac{1}{2}$
16.	2° 39' 33 $\frac{1}{2}$ ".	16,753 $\frac{1}{2}$
17.	1 oz. 14 pwt. $2\frac{1}{2}$ gr.	1,433
18.	2 ft. 4 in.	49
19.	5 sq. yd. 7 sq. ft. 83 $\frac{1}{2}$ sq. in.	13,250 $\frac{1}{2}$
20.	3 $\frac{1}{2}$ gi.	5 $\frac{1}{2}$
21.	3 d. 19 h. 42 m. 51 $\frac{1}{2}$ s.	160 $\frac{1}{2}$
22.	5 sq. ft. 87 $\frac{1}{2}$ sq. in.	1,413
23.	24 d. 6 h. 14 m. 34 $\frac{1}{2}$ s.	61,135 $\frac{1}{2}$
24.	145 sq. ft. 119 $\frac{1}{2}$ sq. in.	36,749 $\frac{1}{2}$
25.	1 gr. 2 doz. 3.	288 $\frac{1}{2}$

PERCENTAGE (page 253).

The following answers in percentage are either exact or carried out to mills, but it is suggested that pupils should be required to give answers only to the nearest cent.

Examples.	216	217	218	219
1.	\$ 32.004	\$ 2.1336	\$ 0.8696	\$ 12,801.60
2.	24.432	2.2905	2.4622½	3,817.50
3.	2.71524	0.36203½	0.58082½	3,016.933½
4.	14.1076	4.7025½	2.104	35,269.00
5.	280.00	10.00	7.25	57,142.857½
6.	9.6032	1.2004	2.268	6,002.00
7.	0.99374	0.05420½	1.7492½	82.127⅔
8.	0.805	0.7043¾	0.13134¾	8,050.00
9.	305.00	25.41¾	46.605	30,500.00
10.	50.4072	1.1201¾	0.56074	6,223.111½
11.	18.024	0.1877½	3.7284¾	1,251.666¾
12.	162.00	43.20	6.6728	180,000.00
13.	13.808	4.6026¾	7.7370¾	34,520.00
14.	5.4675	0.3037½	0.55784	675.00
15.	42.503	6.3754½	1.47441½	17,001.20
16.	0.71588	0.01301¾	1.316	59.163⅔
17.	70.001	2.3333¾	1.1263½	7,000.10
18.	0.382	0.1528	0.05538¾	3,820.00
19.	23.6016	2.36016	4.6288	14,751.00
20.	0.944	0.0118	0.467289	147.50
21.	56.6342	4.0453	25.5375	11,558.00
22.	78.4908	0.327045	9.1339	5,450.75
23.	5,000.00	6.00	250.30	20,000.00
24.	3,600.00	2.88	1,641.312	3,600.00
25.	63.609	2.726	4.699	12,981.42¾

PERCENTAGE (page 253).

Examples.	220	221	222	223	224
1.	\$ 192,024.00	2.5% +	\$ 29.8704	\$ 30.48	\$ 609.60
2.	40,720.00	9.2 +	22.1415	22.623	282.777
3.	22,627.00	18.8 +	2.35320 $\frac{1}{2}$	2.637	87.871
4.	105,807.00	11.1 +	9.4050 $\frac{3}{4}$	13.831	691.549
5.	1,600,000.00	2.5	270.00	261.683	3,738.317
6.	48,016.00	20.9 +	8.4028	9.234	230.846
7.	1,505.66 $\frac{3}{4}$	166.9 +	0.93953 $\frac{3}{4}$	0.896	8.138
8.	9,200.00	8.7 +	0.1006 $\frac{1}{2}$	0.798	79.702
9.	366,000.00	14.1 +	279.58 $\frac{1}{2}$	277.273	2,772.727
10.	280,040.00	1.0 +	49.2870 $\frac{3}{4}$	46.246	513.834
11.	120,160.00	20.4 +	17.8362 $\frac{1}{2}$	16.093	134.107
12.	675,000.00	3.2 +	118.80	157.282	5,242.718
13.	103,560.00	42.0 +	9.2053 $\frac{1}{2}$	13.538	676.862
14.	12,150.00	9.6 +	5.1637 $\frac{1}{2}$	5.017	55.733
15.	113,341.33 $\frac{1}{2}$	3.0 +	36.1275 $\frac{1}{2}$	40.48	809.58
16.	3,254.00	180.5 +	0.070286 $\frac{3}{4}$	0.645	5.863
17.	210,003.00	1.5 +	67.6676 $\frac{1}{2}$	63.638	636.372
18.	9,550.00	10.3 +	0.2292	0.379	37.821
19.	147,510.00	17.8 +	21.24144	22.694	567.346
20.	11,800.00	48.8 +	0.9322	0.875	10.925
21.	161,812.00	42.8 +	52.5889	52.93	756.13
22.	1,308,180.00	11.5 +	78.163755	70.082	584.008
23.	16,666,666 $\frac{3}{4}$	5.	4,994.00	3,333.334	6,666.666
24.	4,500,000.00	45.5 +	3,597.12	1,800.00	1,800.00
25.	302,900.00	7.0 +	60.882	59.448	849.252

PERCENTAGE (page 253).

Examples.	225	226	227	228
1.	June 20, 1873.	\$ 0.094	\$ 0.015 $\frac{3}{8}$	\$ 0.078 $\frac{1}{2}$
2.	Feb. 2, 1873.	0.071	0.011 $\frac{1}{2}$	0.094 $\frac{3}{8}$
3.	Oct. 27, 1876.	0.295	0.049 $\frac{1}{2}$	0.147 $\frac{1}{2}$
4.	July 24, 1875.	0.219 $\frac{1}{2}$	0.036 $\frac{7}{8}$	0.073 $\frac{1}{2}$
5.	March 19, 1874.	0.138 $\frac{1}{2}$	0.023 $\frac{1}{8}$	0.161 $\frac{7}{8}$
6.	Sept. 1, 1876.	0.285 $\frac{1}{2}$	0.047 $\frac{3}{8}$	0.190 $\frac{1}{2}$
7.	May 15, 1879.	0.448	0.074 $\frac{3}{8}$	0.821 $\frac{1}{2}$
8.	Nov. 22, 1874.	0.179 $\frac{1}{2}$	0.029 $\frac{1}{2}$	0.029 $\frac{1}{2}$
9.	Sept. 30, 1875.	0.230 $\frac{1}{2}$	0.038 $\frac{1}{2}$	0.384 $\frac{1}{2}$
10.	Dec. 14, 1871.	0.002 $\frac{1}{2}$	0.000 $\frac{1}{2}$	0.004 $\frac{1}{2}$
11.	Feb. 27, 1873.	0.075	0.012 $\frac{1}{2}$	0.15
12.	April 21, 1873.	0.084 $\frac{1}{2}$	0.014 $\frac{1}{8}$	0.042 $\frac{1}{2}$
13.	Dec. 18, 1876.	0.303 $\frac{1}{2}$	0.050 $\frac{7}{8}$	0.101 $\frac{1}{2}$
14.	Dec. 6, 1872.	0.061 $\frac{1}{2}$	0.010 $\frac{1}{2}$	0.092 $\frac{1}{2}$
15.	Oct. 10, 1872.	0.052 $\frac{1}{2}$	0.008 $\frac{3}{8}$	0.043 $\frac{1}{2}$
16.	June 29, 1872.	0.335 $\frac{1}{2}$	0.055 $\frac{1}{2}$	0.614 $\frac{1}{2}$
17.	Feb. 24, 1872.	0.014 $\frac{3}{8}$	0.002 $\frac{1}{2}$	0.024 $\frac{1}{2}$
18.	August 15, 1874.	0.163 $\frac{1}{2}$	0.027 $\frac{7}{8}$	0.027 $\frac{7}{8}$
19.	March 14, 1872.	0.017 $\frac{3}{8}$	0.002 $\frac{1}{2}$	0.011 $\frac{1}{2}$
20.	July 29, 1876.	0.280 $\frac{1}{2}$	0.046 $\frac{1}{2}$	0.373 $\frac{1}{2}$
21.	Dec. 12, 1873.	0.122 $\frac{1}{2}$	0.020 $\frac{1}{2}$	0.142 $\frac{1}{2}$
22.	Dec. 1, 1875.	0.240 $\frac{3}{8}$	0.040 $\frac{1}{2}$	0.481 $\frac{1}{2}$
23.	April 10, 1872.	0.022 $\frac{1}{2}$	0.003 $\frac{1}{2}$	0.186 $\frac{1}{2}$
24.	Nov. 28, 1871.	0.000 $\frac{1}{2}$	0.000 $\frac{1}{2}$	0.002 $\frac{1}{2}$
25.	July 12, 1873.	0.097 $\frac{1}{2}$	0.016 $\frac{1}{2}$	0.113 $\frac{1}{2}$

PERCENTAGE (page 253).

Examples.	229	230	231	232	233
1.	\$ 0.005 $\frac{3}{8}$	\$ 0.083 $\frac{1}{8}$	\$ 50.139	\$ 53.482	\$ 700.247
2.	0.008 $\frac{1}{8}$	0.103 $\frac{1}{4}$	28.911	31.621	327.083
3.	0.019 $\frac{3}{8}$	0.167 $\frac{1}{8}$	13.349	15.129	117.207
4.	0.024 $\frac{7}{8}$	0.097 $\frac{1}{8}$	51.61	68.813	860.21
5.	0.005 $\frac{1}{2}$	0.167 $\frac{1}{2}$	645.555	668.611	4,553.333
6.	0.023 $\frac{1}{2}$	0.214 $\frac{3}{8}$	45.748	51.467	308.702
7.	0.044 $\frac{1}{2}$	0.866 $\frac{1}{2}$	7.419	7.824	13.081
8.	0.026 $\frac{1}{2}$	0.056 $\frac{1}{4}$	2.406	4.511	94.936
9.	0.032 $\frac{1}{2}$	0.416 $\frac{1}{2}$	1,171.708	1,269.35	3,753.025
10.	0.000 $\frac{17}{80}$	0.004 $\frac{1}{80}$	2.38	2.433	561.666
11.	0.001 $\frac{1}{80}$	0.151 $\frac{1}{80}$	22.53	22.764	161.465
12.	0.011 $\frac{1}{8}$	0.053 $\frac{1}{8}$	227.25	287.85	5,854.50
13.	0.033 $\frac{1}{8}$	0.134 $\frac{1}{8}$	69.845	93.127	899.936
14.	0.005 $\frac{1}{8}$	0.097 $\frac{1}{8}$	5.604	5.915	64.486
15.	0.006 $\frac{1}{8}$	0.049 $\frac{1}{4}$	36.953	42.497	894.404
16.	0.011 $\frac{1}{4}$	0.625 $\frac{1}{4}$	4.001	4.073	8.69
17.	0.000 $\frac{1}{4}$	0.025 $\frac{1}{4}$	17.111	17.681	710.276
18.	0.010 $\frac{1}{8}$	0.038 $\frac{1}{80}$	1.038	1.454	44.432
19.	0.001 $\frac{1}{4}$	0.012 $\frac{1}{8}$	6.949	7.644	600.464
20.	0.004 $\frac{1}{80}$	0.378 $\frac{1}{80}$	4.41	4.465	15.107
21.	0.010 $\frac{1}{4}$	0.153 $\frac{1}{8}$	115.628	123.887	908.169
22.	0.002 $\frac{1}{80}$	0.483 $\frac{1}{80}$	314.835	316.147	811.507
23.	0.000 $\frac{1}{80}$	0.186 $\frac{1}{80}$	1,861.111	1,863.344	10,223.333
24.	0.000 $\frac{1}{4}$	0.002 $\frac{1}{8}$	10.00	10.008	3,600.60
25.	0.004 $\frac{1}{8}$	0.118 $\frac{1}{8}$	103.364	107.794	997.238

PERCENTAGE (page 253).

Examples.	234	235	236	237
1.	\$ 93.835	\$ 51.513	\$ 742.566	1.6% +
2.	73.615	29.764	354.299	7.7 +
3.	7.815	5.315	104.999	3.8 +
4.	40.238	23.673	818.322	3. +
5.	836.057	376.549	4,640.468	1. +
6.	27.899	17.382	278.519	4.4 +
7.	3.074	1.536	10.479	22.3 +
8.	2.274	1.611	93.388	2.9 +
9.	935.74	601.39	3,538.356	3.6 +
10.	153.26	54.139	649.757	23. +
11.	56.297	23.626	174.248	16.3 +
12.	466.352	230.437	6,264.631	2.3 +
13.	39.384	14.698	800.944	8.3 +
14.	16.622	5.738	70.476	9.4 +
15.	124.618	82.269	986.167	3.4 +
16.	2.216	1.208	7.550	3.2 +
17.	214.762	90.615	812.092	6.3 +
18.	1.078	0.659	44.315	3.8 +
19.	68.567	31.066	684.514	60.5 +
20.	2.843	1.654	13.688	10.4 +
21.	169.104	60.152	938.603	20.6 +
22.	245.165	81.824	758.82	2.8 +
23.	21,500.00	8,532.986	11,601.17	13.4 +
24.	22,320.00	4,522.50	4,176.421	16,400.
25.	189.93	107.504	1,054.197	4.3 +

PERCENTAGE (page 253).

Examples.	238	239	240	241
1.	5 m. 21 d.	\$ 208.148	\$ 585.082	\$ 593.582
2.	1 y. 19 d.	297.253	285.154	278.989
3.	5 y. 6 m. 18 d.	115.816	69.89	78.874
4.	4 y. 2 m. 10 d.	1,078.359	578.417	657.288
5.	4 m. 4 d.	619.621	3,513.909	3,444.152
6.	4 y. 7 m. 29 d.	264.489	186.711	201.653
7.	14 y. 4 m. 20 d.	18.360	6.238	4.96
8.	4 y. 7 m. 20 d.	234.368	68.258	78.163
9.	1 y. 3 m. 18 d.	1,119.826	2,478.667	2,203.491
10.	1 m. 12 d.	1,434.117	558.497	557.709
11.	1 y. 8 m. 7 d.	205.00	139.72	130.608
12.	10 m. 8 d.	4,172.673	4,980.784	5,181.927
13.	15 y. 9 m. 3 d.	2,867.94	529.65	626.971
14.	1 y. 6 d.	63.653	57.23	55.619
15.	6 m. 8 d.	589.847	807.913	814.645
16.	16 y. 1 m. 13 d.	19.112	4.873	4.03
17.	1 m. 24 d.	445.909	689.891	683.306
18.	7 y. 4 m. 22 d.	145.47	32.841	37.188
19.	4 y. 18 d.	8,932.075	579.796	583.171
20.	6 y. 12 d.	15.434	9.216	8.589
21.	5 y. 7 m. 10 d.	2,382.507	720.766	707.89
22.	11 m. 16 d.	157.479	527.208	441.554
23.	1 m. 5 d.	2,686.567	9,781.545	8,430.913
24.	5 m. 13 d.	590,400.00	3,599.40	3,590.027
25.	11 m. 19 d.	565.89	827.972	815.892

PERCENTAGE (page 253).

Examples.	242	243	244	245
1.	\$ 46.498	\$ 54.998	\$ 18.402	\$ 621.678
2.	26.411	20.246	4.682	300.718
3.	11.634	20.618	2.511	87.997
4.	48.092	126.963	9.405	695.975
5.	555.848	486.091	87.888	3,912.112
6.	38.427	53.369	7.415	232.665
7.	4.074	2.796	0.472	8.562
8.	2.337	12.242	0.802	79.698
9.	846.509	571.333	259.25	2,790.75
10.	2.371	• 1.583	2.80	557.28
11.	19.592	10.48	4.656	145.544
12.	218.073	419.216	66.60	5,333.40
13.	63.429	160.75	0.92	689.48
14.	5.131	3.52	0.182	60.568
15.	35.415	42.147	37.308	812.752
16.	2.478	1.635	0.427	6.081
17.	16.704	10.119	17.694	682.316
18.	1.012	5.359	0.278	37.922
19.	6.869	10.244	7.146	582.894
20.	3.211	2.584	0.642	11.158
21.	101.17	88.294	2.831	806.229
22.	212.536	126.882	1.526	652.564
23.	1,569.087	218.455	1,902.777	8,097.223
24.	9.973	0.60	40.00	3,560.00
25.	92.808	80.728	40.285	868.415

PERCENTAGE (page 253).

ROOTS (page 276).

Examples.	246	247	248
1.	\$ 662.951	25.4558...	200.3...
2.	308.952	21.7485...	186.9...
3.	95.826	28.8963...	166.9...
4.	734.77	24.3310...	198.4...
5.	4,076.779	26.9443...	208.5...
6.	251.744	30.8868...	179.4...
7.	9.299	19.1572...	157.4...
8.	85.623	17.0000	141.7...
9.	3,213.909	25.1992...	186.3...
10.	561.953	22.1133...	179.4...
11.	152.564	19.3649...	196.2...
12.	5,536.568	26.2488...	154.2...
13.	693.172	27.6405...	170.0...
14.	60.871	29.4108...	211.2...
15.	897.318	28.2134...	161.1...
16.	6.749	18.6279...	185.7...
17.	710.79	24.2074...	116.9...
18.	39.944	25.0399...	195.0...
19.	600.957	19.8746...	186.1...
20.	12.302	27.1661...	141.5...
21.	811.494	24.0624...	174.4...
22.	654.853	22.0454...	152.4...
23.	10,233.668	30.6920...	194.7...
24.	3,602.401	16.6733...	182.5...
25.	944.594	24.2280...	194.9...





